UCL Université catholique de Louvain

LOUVAIN School of Management

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Assessing the socio-economic impact of Community Currencies

Cross examination of case studies with a standardized framework

Research Master's Thesis submitted by
Maximilian Langeder

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Supervisors
Prof. Benoit Gailly
Prof. Christophe Lejeune

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Executive Summary

Nowadays, Community Currencies (CCs) are a trending system for bringing change in communities. Changes act mainly around the 3 pillars of sustainable development (ei Economic, Social, Environmental). In the field of CC, besides Place and Bindewald's prototype, there is no standardized impact assessment framework in academic publication yet.

The present research aims at taking a look at how effective this prototype is by analysing the impact of 4 CCs. The research is based on a comparison of 4 case studies (Le Florain, Le Cairn, La Gonette and the GEM Project). The results show that the analysed CC have indeed an impact on communities in line with their objective. Regarding the framework, because of its prototypical stage, issues are still to clear up. It is recommended to create a lighter version that would be embeddable into the CC operations by volunteer and CC managers.

This research is an effort to start a compendium of impact assessment case studies which can *in fin*e help to the emergence of new initiatives as well as providing recommendation for further development of the framework. However, limitations result from the type of research methodology adopted (i.e. data collection and case study format).

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Part 1: Introduction

Motivations

This project started thanks to a French documentary: "Demain". As I was already interested in sustainable development, I, however, never expected that money design could have an impact on social relations and communities. From my perspective, a currency was just a tool that eases transactions but I would never expect it to have a meaningful social impact on society.

This is where my thoughts started and where I began a broad research on the topic.

Context

Complementary Currency is the broader family of currencies to which local currencies well known (i.e. Brixton Pound, Ithaca HOUR, LETS) or business schemes like miles and loyalty points or bitcoins belong.
The sub-set of complementary currencies which are proposed by Bernard Lietaer (2001) as a new tool to promote sustainable development is called Community Currency (CC hereafter).

For the past 40 years, CCs were created as tools to impact meaningfully communities by offering alternative means of payment to the national currency. They are promoting a wide array of objectives rooted in the sustainable development movement.
Support the local economy, counteract the globalisation, create meaningful relationships in communities or promote green behaviour are just some examples of goals CCs have. As their history shows, diversity is embedded in the CC field's DNA, many models coexist and all under the umbrella of Community Currency.

Contribution

Unfortunately, the analysis of their impact, as well as impact assessment guidelines, has been marginal compared to many other sustainable development fields. Impact assessments are useful from 2 perspectives. With an inward perspective, an impact assessment tool can help with the project's improvement regarding operations,

objectives alignment or by improving efficiency (cost reductions…). With an outward perspective, it can provide the project with credibility making it a legitimate stakeholder or be a support for fundraising and search for external funding (Place and Bindewald, 2015, GIIN, 2016).
In reaction to these observations, Christophe Place and Leander Bindewald developed a prototype of standardized impact assessment tool to fill in the gap in the field in recent years. Due to its prototypical stage, further research with other initiatives is needed to build a bottom-up methodology to improve this impact assessment methodology proposition (Place and Bindewald, 2015).

Therefore, the present thesis will initially focus on assessing several cases of currently active CC offering insights on their impact and adding to the compendium of cases for new initiatives to take from. And follow with assessing the performance of the impact assessment prototype in order to give recommendations and to give more substance to develop it.

Thesis structure

This paper follows with 3 distinct parts:

The literature review is articulated into 4 chapters.
First, an explanation about money in general is given as well as how money is created.
Second, context is provided to the CC field in general by giving an historic perspective with its genesis and where CC are now. A definition of "what a Community Currency is" is proposed with typologies of current and past CCs.
Third, as the CC movement is closely linked to the sustainable development movement, their various aims are reported following the 3 pillars of sustainable development (Economy, Social and Environment)
Finally, we enter in the main subject of the paper: how to assess the impact of a currency and with which tools.

The second part is the empirical part which starts with a chapter on the methodology adopted in the paper. How the context and the data collection were chosen.
The second chapter presents the cases as well as the data collected on the cases.

In the third chapter, the data and impact of CC is discussed and analysed.
The closing chapter offers recommendation for further research in the field of CC as well as recommendations focussed on the standardized framework.

The final and closing part is the conclusion of the paper. It summarizes results, limitations and recommendation of the present research.

Part 2: Literature Review

Chapter 1: What is money?

Before diving into the definition of a community currency, it is important to take a look back at what is a currency? What functions does it fulfil in our society? Why does it exist in the current state?

A practical definition of money would be that money is an agreement, within a community, to use something as a means of payment (Greco, 2001; Lietaer, 2001). Money could take any form that would suit the most to the community from paper, to any physical object or electronic data. As Reigel (1978:15 in Pacione, 2011) explains,

"Money simply does not exist until it has been accepted in exchange. Hence two factors are necessary for money creation; a buyer, who issues it, and a seller, who accepts it. Since the seller expects, in turn, to reissue the money to some seller, it will be seen that the money springs from mutual interest and cooperative action among traders, and not from authority."

Money in the modern economy is an IOU that everyone in the economy trusts. (McLeay, et al. 2014). This highlights the importance of trust when issuing and using money.

4 Functions

Monies and currencies can also be defined by their functions. Currencies can have 4 possible functions which influence the relations between actors on the market. "All purpose" currencies exist. Typically, the sovereign/national currencies are characterized by all four functions. However, this is not necessary. A currency remains a currency even if it features only one function.
The IMF (2000) acknowledges 3 functions to money: a unit of account, a medium of exchange and a store of value. A fourth category can be used as well even if it is considered as the mixed of the 3 others: standard of deferred payment (or standard of value).

Unit of account

In the middle ages, there was no standardised measure of payment. As Einaudi (cited in Peacock, 2014) explains:

"A customer could pay a shopkeeper for an ell of velvet, priced 10$ tournois in money of account, by giving him 4 écus du Soleil rated at 2$ 10s Each. To be able to pay in a currency, they went through a 'ghost money' that filed the role of unit of account. Everything could be measured with this 'ghost money' but it did not correspond to any physical object.'

Not so long ago, the European ECU was a currency with only one function: Unit of account. As the predecessor of the Euro, it was composed of a basket of European currencies and its aim was to provide a unit of account to European currencies to avoid exchange rate fluctuations (Deutsche Bundesbank).

Means of exchange

A currency is used as a means of payment to avoid the inefficiency of barter as it is easier to exchange a simple bank note or a piece of rare metal than a chicken or some bulky consumable. Thanks to the currency, when you want something you can get it. You don't need to wait for your harvest or to transport a whole cow.

Store of value

A currency is a store of value when you can save it, store it and use it later. Typically, gold has been a store of value because it is scarce, doesn't rot or go bad and is accepted as valuable by society.

Standard of deferred payment

This function is a more controversial function as it is a mix of the previous. The thinking behind this function is that you could agree to get a payment in a precise currency in the future for something you do today. For example, a salary or a pension, you agree to get it in Euro at the end of the month. That means that you consider that Euro will still have the expected value at the end of month.

Monetary Creation

Three main stakeholders appear during the process of monetary creation. The central banks, the commercial banks and the consumers.

Central Banks

The central banks' *raison d'être* is to regulate the quantity of available currency in the economy (Mankiw et al., 2011). In the case of the Eurosystem and the ECB, their aim is to maintain price stability through monetary policies (ECB website). Their final objectives in doing so are economic growth and job creation. Central banks are the only institutions authorized to issue "Base money". It encompasses the "Currency" (paper currency, coins) aimed at consumers and the "reserves" aimed at commercial banks.
The tools given to the central banks are monetary policies which can be of 3 natures: Open-market operations; setting refinancing rates and setting mandatory reserve levels. Concerning the former, open-market operations consist simply of selling or buying out bonds (which are the reserves). When the ECB buys back bonds, it issues more money.
The second, the refinancing rate is the rate at which the ECB lends in the short term with repurchase agreement. Repurchase agreements are agreement where the Central bank accepts to buy bonds from the commercial bank's reserves for a fixed amount of currency that is made available for withdrawal by the consumers. However, the repurchase agreement is fixed in time. The commercial bank agrees to buy back the bonds in the short term.
The last type of policies is the setting of reserve levels. This sets the lower limits of the amount a commercial bank has to keep in provision (Mankiw et al., 2011; McLeay et al., 2014).

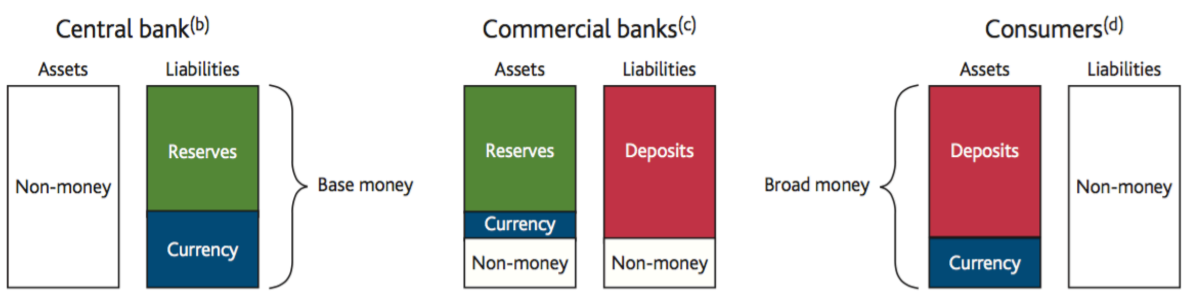


Figure 1 : Stylized balance sheets of different types of money holders and issuers in the economy

Source: McLeay et al., 2014 p8

Commercial Banks

Whereas central banks create money by lending to commercial banks, commercial banks are where most money is created. The commercial bank can lend money in the form of deposits to customers which are “backed” by their reserves. Reserves are necessary to cover withdrawals of currency by consumers. Nevertheless, commercial banks money creation (i.e. deposits) is limited by their internal policies (risk mitigation…), by the money holder behaviour (i.e. consumer) and by monetary policies. In the European union, as for now defined by Basle III, the rate of reserve (minimal total capital ratio) is at 10,5% (Moody’s Analytics, 2013). This means that altogether, banks can approximatively with 1€ create 10€ by issuing loans to consumers.

To illustrate that, Bank A has 100 in deposit for 10 in reserves. However, the person to whom the money is lend will spend it and eventually the money will be in Bank B. Bank B can create a new loan with the reserve of 9.

Bank A			
Assets		Liabilities	
Reserves	10	deposit	100
Credits	90		

Bank B			
Assets		Liabilities	
Reserves	9	deposit	90
Credits	81		

By the end, for 10 in reserves, the commercial bank system as a whole will have created 100 (Mankiw et al., 2011).

Impact of monetary creation

By controlling the amount of money, central banks and the ECB can influence economic growth and price stability (ECB website). To do so, the ECB’s main objective is to maintain beneath but close to 2% of inflation on the medium term. Inflation is defined as a general rise in prices of goods and services on the medium term which results in a monetary depreciation (Gerdesmeier, 2009).

Currency features

Backing

On top of the 4 functions money can have, it can also be backed or not. Before the Bretton-Woods system most sovereign currencies were backed by gold, meaning each Franc/Deutsch Mark/Pound was a right for the holder to get a piece of gold. After Bretton-Woods, most currencies were backed by the US$ which *in fine* was backed by gold. At that time, the USA had 80% of all gold reserves in the world (Ina, 2008). Backed currencies are in fact the right to get something back from the promise that is 1 Franc/Deutsch Mark/Pound.

In 1971, US president Nixon decided to abandon the Gold Standard (Federal Reserve History, 2013). The US$ is not backed by gold anymore. Since then, the US$ and all sovereign currencies became what can be called Fiat monies (i.e. currencies that are not backed and represent a debt). The fiat money system works because people have trust in the system.

Whereas, in recent times, “official” currencies are backed by taxes or gold, a currency could be backed in many different ways. For example, it could be backed by a service, an action. It is not bound to be gold. It is commonly accepted that it should be scarce. Therefore, gold and precious metals were used.

Account balance

Paper currency is not the only way to store a currency. Banks under the form of deposits and bank accounts can store currencies. A bank account has a balance which is either positive, meaning you got the money or an outstanding claim to it, or negative, meaning you don’t have the money and you are in debt. At some point, you will need to repay the bank. The sum of all accounts could either be a fixed number (i.e. the outstanding cash) or 0. Zero would mean that for each debt there is someone with a positive balance. Each time you buy, you need at the end to produce the same amount.

Convertibility and pegging

Several currencies coexist around the world. Depending on the context, businesses and users can accept one or several. Nevertheless, when using several at the same time, there needs to be a way to convert one into the other. By converting a currency, one shows a preference of use.

Furthermore, authorities can decide to peg their currency to another. According to Das (2003), such action is motivated by 2 reasons. The first aim is lower inflation by “importing” the other currency’s policies and credibility. The second aim is for pegging to contribute to faster output growth in the medium and long term by showing openness to international trade.
Despite aiming at those, pegging its currencies has cost: reducing the policymakers’ ability to respond to shocks and the effects are not immediately obvious.

Dollarization, where a country abandons its currency for a stronger one like the US$, is one step further from pegging. A country loses its ability to make any monetary policy as seen in the case of the Ecuadorian dollarization. It has considerably decreased transaction costs with its main trading partner, the US, as well as in the medium term seen an inflation rate close to the US (Wang, 2016).

Monetary Unions

Monetary unions are, first of all, political issue which are part of a larger strategic push towards free trade agreements, harmonisation of legal standards, and liberalised migration laws (Brash, 2000).
Being part of a monetary union has several possible advantages: Transaction cost reduction; Increased price transparency; limiting international currency speculation; Increased inward investment; Elimination of exchange rate uncertainty (Stankovic, 2013, Mankiw et al, 2011))
However, as for pegging and dollarization, there is a similar risk of abandoning its monetary policy power because there is a single currency, there is only a single policy for all.

Chapter 2: What are Community Currencies?

Now that the general features of money have been outlined, this chapter focuses on understanding Community Currencies (CC, CCs) in particular. The context of their evolution is important to understand the causes of their emergence and why the field of CC is so diverse.

Origin of Community Currencies

Modern community currencies have largely been influenced by Silvio Gesell and his stamp scrip, later known as Freigeld.

Gesell's work is based on the critique of Marx that the source of surplus does not come from production but from the origin of money in the market. It is not the employee who is exploited by the employer but both employer and employee are exploited by the financial capitalist (Ilgman, 2015). Gesell notes that money is superior to commodities because of its nature. There is an inherent conflict between 2 of its functions; the store of value and medium of exchange. It cannot rust, go bad, break or die. Therefore, money holder gains power over the commodity holder because of the non-perishability of money. To be tempted into an exchange, the merchant needs to offer a discount. And that is where the surplus lies according to Gesell (Peacock, 2014). The privilege given to the money holder leads to slow down monetary circulation and, thus, economic activity (Blanc, 2006).

To Gesell, money was meant to facilitate the exchange of commodities and to avoid the difficulties of barter. That's why, money should be stripped from this superiority and rust as do commodities. Hence, the apparition of the devaluation (demurrage) of money at fixed intervals or negative interest rate (Ilgman, 2015). Gesell limits the functions of money to a standard of deferred payment and a mean of exchange (Kennedy, 2006)

In the 1930's, many CC systems flourished, for instance the Wörlg in Austria or the Wära in Schwanenkirchen, Germany. The prominent economist Irving Fisher used Gesell's theory after the great depression where cities tried to cope with the aftermath of the crisis by issuing stamp scrip money. His ultimate goal was to increase the general price level following sharp deflation. Fisher's idea for the CC is for it to be a crisis currency that would help the national currency (Godschalk, 2012). In order to do so, he wanted to increase the velocity of script money and therefore created a demurrage mechanism where a stamp script was to be spent at fixed interval to maintain the value of the script money. To prevent hoarding, the currency had to stay in circulation, so he proposed that the stamp be redeemable in US Dollar but at cost. (Peacock, 2014)

Community Currencies today

In the modern era community currencies field, there has been 4 waves of CC-models. The LETS (Local Exchange Trading System) developed by Michael Linton in 1983 in Canada is the first wave. It quickly spread throughout the US and the UK. It was originally conceived as "a self-regulating network which allows users to issue and manage their own money supply within the boundaries of the network". The following features (Community Currency Knowledge Gateway) were seen:

- Co-operation: No-one owns the network
- Self-regulation: network is controlled by all members
- Empowerment: each member issues the internal currency
- Money: is used primarily as a means of exchange

The second wave was in the 90's with time banks. Cahn developed the time banks with the credo that everyone's time is worth the same (Cahn, 2000 cited in Seyfang and Longhurst 2013). Although, similar models emerged in Japan with Fureai Kippu or Banche tel tiempo in Italy without link to Cahn (Blanc, 2011). The currency is the time someone is spending helping a colleague. Money is created on the spot and a balance account is kept. All accounts balancing at 0 sum.

Convertible Local Currencies (CLC) as Dittmer (2013) calls them have had a surge during the last decade. They are the third wave of design. From the US (Berkshares), the UK to Germany and its Regiogeld. These currencies have a profound local and territorial anchorage. They are implemented in a clearly economic perspective (Blanc, 2011).

The 4th wave of currencies follows the 3rd wave by complexifying the CLC model. Whereas CLC's main objectives where economic, the next wave embodies sustainable development values and objectives. They put a great emphasis on the environment like no other CC design before. Currently, more than 40 active CCs are to be found in France only. An example of complexification is the limited opportunity to convert back into the national currency only for business and at cost.

Definition of a Community Currency

To qualify as a CC, a currency must perform at least one of the previously mentioned functions. Where national currencies perform all four functions exclusively or with near exclusivity, a CC is designed as to work alongside the national currency.

Peacock (2014) defines a CC as a monetary unit which denominates the value of goods and services. Whether it assumes physical form or not, a CC is not issued by a sovereign government or a delegate thereof, and the exchange of a CC from one person to another (when physically or virtually) is the manner in which payments are effected in transactions denominated in the CC.

However, the most commonly accepted and used definition in the academic literature would be: "an agreement to use something else than legal tender (i.e. national money) as a medium of exchange, with the purpose to link unmet needs with otherwise unused resources" (Hallsmith and Lietaer, 2006).

Community Currency Typology

Commonly, local currencies, community currencies and complementary currencies are often used as synonyms and put every type of currency that diverges from the national/sovereign currency in the same basket. However, the terms Local/Community Currency are often misused and lead to misunderstanding.

Around the same time, 2 typologies appeared because scholars felt the need for a precise typology to have a common language to address these different currency models and avoid misunderstandings.

Blanc's Typology

Blanc (2011) developed one where the core idea was to produce a typology that would be flexible to new possible *modus operandi*, letting an open door to monetary innovation. It is characterized by two levels: the first level is based on the general philosophy of the CC; the second on generations which differ in core operational designs.

The first level is defined by 3 types:

- Territorial Project: Projects that are locally based and where the guiding principle is redistribution.
- Community Project: Projects that are community-based and where the guiding principle is reciprocity.
- Economic Project: Projects that are based on production and market exchange. The guiding principle being market exchange.

The second level is based on design generations:

As described above, 4 main waves of CC designs have been observed. These designs are clustered in generations. Generations are not replacing each other unlike natural evolution where the new and stronger takes the advantage. They are meant to coexist. Each emphasising a specific need. The development of a new generation is meant to give a new impetus to the movement. Therefore, different generations and CC models are living along and each has its own advantage (Fare, 2013).

Gene-ration	Significant cases	Currency scheme types	Guiding principle	Content overview
G1	LETS, trueque, CES	Mostly community	Reciprocity first; various distance to market	Inconvertible schemes; quite small openness to external economic activities
G2	Time banks, Accorderie	Community	Reciprocity first; various distance to local governments	Inconvertible schemes with time currencies; frequent partnerships, especially with local governments
G3	Ithaca Hour, Regio, Palmas, BerkShares	Local and complementary	Market first; generally distant from local governments	Convertible schemes; local businesses are included; interest of partnerships with local governments
G4	NU, SOL	Mostly complementary	Market first, with links to governments and reciprocity	Complex schemes oriented toward consumer responsibility or / and economic activities re-orientation and other purposes; partnerships are necessary

Table 1: Blanc's Typology : Generation of CC designs

Source: Blanc (2011) p9.

Seyfang and Longhurst's Typology

Seyfang and Longhurst (2013) based their research on an extensive pool of CC* (39 nationally-based currency groupings, in 23 countries, across 6 continents and representing a total of 3418 local projects.) and distinguished 4 types of community currencies that differentiate themselves by their process of money creation and design.

- Service Credits: 50% (e.g. Times Banks)
- Mutual Exchange: 41% (e.g. LETS): where non-tradable can be sold (i.e. services)
- Local Currencies: 7%
- Barter Market: 1.4%

Service Credit

According to Seyfang and Longhurst research in 2013, these are the most common community currencies to be found, accounting for more than 50% of the studied cases.

The main design by Cahn is that members enrol at a bank and list the services they wish to offer and receive. Each hour of community work is rewarded by the bank with one credit of a time-based currency, independently of the service provided. Participants can either use their time credits to purchase services from other users directly, store the earned credits for later use or donate to someone else (Cahn and Gray, 2015; Hallsmith and Lietaer, 2011).

The credit is created at the time of the service. For each 1$ credited on one's balance, there is a debit on someone's balance of 1$. It is called a zero-sum game and the credit is backed by the real economy.

Mutual Exchange

Mutual exchange account for more than 40% of cases. They are based on the trust that others from the community will meet their commitment. Therefore, they are geographically bounded. Typically, they are interest free credits that can be spent within the circle of trade.

The most famous examples are LETS or Local Exchange Trading System pioneered by M. Lindon as emergency money during recession. Members advertise what they want and offer in a directory (Seyfang and Longhurst, 2013). A LETSystem is a self-regulating economic network which allows its members to issue and manage their own money supply within a bounded system (Ekins, 2000 in Schraven, 2000).

Local Currencies

These are the CCs that enjoyed the most media attention in the past years but only occur in 7% of the cases. Typically, they are based on the CLC-model (Convertible Local Currency) which is an evolution of Gesell's theory (Greco, 2018). It is a paper based currency (or electronic now) that is on par with the national currency. Many mechanisms exist in order to keep the money circulating and prevent hoarding. For instance, demurrage (or negative interest) or to change back into national currency but with a fee to keep the currency constant flow. Its aim is to increase resilience in communities and to boost the local spending multiplier (Gelleri, 2009).

Barter Market

Barter Markets are a hybrid of local currency and mutual exchange, comprising a new infrastructure to enable people (prosumer - Producers and consumers) to exchange goods and services within a limited site-specific event without the need for mainstream currency. It is required to first join a local club which will issue a currency that *in fine* is an interest-free loan used to trade with other members at regular dedicated markets (Pearson, 2003). The most prominent example was the Red de Trueque from Argentina. The main function of money in this case is the unit of account.

Blanc's typology is flexible to newcomers and reflects well the goal of the CC whereas Seyfang and Longhurst concentrate more on operational design. Although Blanc's typology has many advantages, it sometimes lacks clarity and is not easy to use for scholars or for CC newbies. The 4 types of typology succeed in being limpid and straightforward and might lack the advantages of Blanc's typologies. This highlights the fact that many monetary innovations are possible and many new types are to come.

Chapter 3: What is the aim of Community Currencies?

As observed, CCs emerged in times of crises. Currently, the lines are sometimes blurred when talking about crises depending on the point of view of the person. This chapter focuses on what the profile of the participants is and what drives them.

Participants

CCs remain on a small scale and are not yet accepted or at least used by the general public. In western countries, participants to CC projects can form 2 clustered groups (Peacock, 2014):
Group I: For those members, using a CC is a symbol of opposition and resistance to the mainstream economy. They want to gain back control over their economic activity. Members are usually well educated, employed and financially secure. These participants join for their green, environmental believes but their economic needs remain unmet by CC systems (Caldwell, 2000). For example, Dittmer (2013) view the Bristol Pound as an "Appeal-to-Elites utopian socialism". Their participation is a political act.

Group II: Those members rely more on CC. They use it for economic gain and material survival which would not be available to them in the formal economy. Their intentions are clearly to expand the CC to gain access to broader choices whereas Group I for which it is more hobby based would keep the community closer or more in line with their values. In his research of the North herts LETS, Caldwell (2000) unveils that participants who needed the system to work had negative balances and quit the system because of its inefficiency. Furthermore, Bristol pounds struggles to gain attraction outside of the educated, environmentally conscious and self-learning circles (Marshall and O'Neill, 2018).

Collom (1998 in Soder, 2008) argues that CCs emerge in communities comprised of intellectuals or highly educated people and income disparity becomes a characteristic of CCs.

CC's Values - The three pillars of sustainability

CCs are part of the solution proposed by advocates of "New Economics" and sustainable development who have been at the forefront of currency experimentation over the last 30 years, for example the New Economics Foundation (UK), Strohalm (the Netherlands), The Schumacher Society (USA), SANE (South Africa) and Living Economies (New Zealand) (Seyfang, Longhurst, 2012).

This trend of "New Economics" has 3 pillars: Economic Sustainability, Social Sustainability and Environmental Sustainability. CC systems are considered to be an effective tool to work on 1 or more of these pillars. For example, French communities often want to localize the supply chain in order to lower greenhouse gases, gain control over the monetary governance and retain monetary flows locally to increase economic activity.

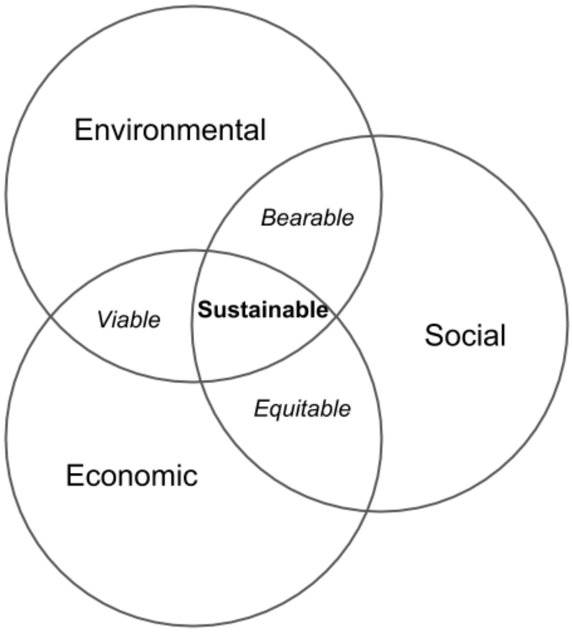


Figure 2 : Venn Diagram of the 3 pillars of Sustainable Development.

Economic sustainability

Rejection of a paradigm

An analysis of Kennedy (Kennedy, 2001 in Michel and Hudon, 2015; Kennedy, 2006) shows that, in Germany, the interest based system is only beneficial to a small minority of rich people while the majority pays almost twice as much as they received in interest. There is a systematic relocation of resources from poor to wealthy segments of the population (Robertson, 1999 in Michel and Hudon, 2015). Considering, on top of that, the past financial crisis, from the English pound devaluation of 1992 (Kennedy, 2006) to the 2008 subprime crisis, citizens have a feeling of disconnection with the economy and loss of control over their currency. Asking people where money comes from and what it represents shows that nobody really can apprehend it and understand it. The fundamental reasons of the existence of CC is the rejection of capitalistic credit-money system and how money is created (Michel and Hudon, 2015). In its critic and rejection of monetary paradigm, CCs are not alone. It is important to note that CCs users are also followed by cryptocurrency adepts who are defending, in the wake of the 2008 financial crisis, the use of monetary innovations, like Bitcoin or Ethereum, without Third party involvement. As these types of currencies are not issued by any government and are peer-to-peer, they are theoretically immune to any manipulation or interference (Bunjaku et al., 2017). Models like Bitcoin offer a system where transfer fee are capped to a minimum and where all transactions are publically available (Nakamoto, 2009).

Resilient community

As well as keeping in touch with the economy, there is a wish to improve the resilience of the community and to stay local as it is at arm's length and boundaries are more understandable. A resilient society being a society able to adapt and recover from disturbances, crisis, adversity or change (Hopkins, 2016). With the famous example of the Swiss WIR, there a counter-cyclical effect of CCs where they are mostly used during period of crisis whereas the national currencies are used when the economy is prosperous. Unlike the national money which is scarce and of which the amount is deliberately restricted as a monetary policy tool, there is no risk of inflation because the supply of local money is directly linked to trade (Pacione, 2011).

Localisation

To this end, localisation is often a key driver of CCs and a mean to re-empower communities (Greco, 2018). CCs prevent money from leaking out of the community. Communities' members will retain control over local investment decision. The coupling of demurrage and retaining of the currency should also increase the velocity of the currencies as it prevents hoarding so the spending multiplier increases too (Godshalk, 2012). Under Gresham's law: *bad money drives out good money*. "Bad money", here the local demurraged currency is less valuable, thus will be used first and circulate more than "good money" (i.e. national currencies). Furthermore, it creates a local network, it localizes the supply chain and the community relies less on imports, finding substitutes locally. Localisation is meant to bring vitality to the local economy and boost it.

Alternative means of credit

In the local network, members can potentially support each other. Local business as they can spend at each other's can give mutual credit to each other which is interest free and more flexible. Sometimes it can be as simple as delaying payment (Pacione, 2011). In rural, cash-poor areas where national currency can be scarce (for example Kenya), CCs can provide liquidity. By creating a new means of issuing credits, CCs can "monetize" the excess capacities of business for local, rural communities (Ruddick, Richards and Bendell, 2015).

Social sustainability

Promotion

As stated above, CCs are also a means of communication to promote sustainable development across the community and to put sustainable development in the public eye. Many CC systems are designed as social change agents, meaning their purpose is to educate the public about economics and localisation (Soder, 2008).

Social inclusion

Furthermore, CCs can also improve people's quality of life by including them in the community and foster relations (NEF, 2015). The CCs rectify the problem of social inclusion by creating alternative means of employment. Taking the Ithaca HOUR, the name itself is a reminder that money actually represents and is worth someone's time (Soder, 2008). Service credits are based on the credo by Cahn (2000) that "Everyone's time is worth the same". Whatever the task or the person, the CCs offer an opportunity to those whose skills are not valued by the formal labour market (Seyfang and longhurst, 2013).

Community "Spirit"

Finally, some CC's primary goal is to create and consolidate social capital. CCs in their collective governance can encourage people to participate in democratic processes in their community. They serve as a basis for interaction among individuals, increasing social capital and building communities (Soder, 2008). They foster relationships and enable participation of hard to reach excluded social groups (Seyfang and Smith, 2002 in Seyfang and Longhurst, 2013). For example, Japanese currencies aim at helping retired persons and by this mean create new relations in the community.

Ecological sustainability

Ecological footprint

This is the most recent key value claimed by CCs. One of the goals of localisation is to keep the supply chain local which implies that product travel less. Acting on the ecological footprint is central to sustainable development as one of the main goals and indicator is to lower the emission of greenhouse gases.

Degrowth

A new trend has also used CCs as a tool to help its purpose: Degrowth. The degrowth movement criticizes what they call the ever-expanding and forever growing paradigm. The degrowth movement wants to go against the tide of growth in general, even green growth (Dittmer, 2013). They argue that the issue is growth itself which will have, on the long term, catastrophic impact on the environment and our societies. They promote a purposive process of downscaling the production and consumption in the short and long term. The aim is mostly to increase wellbeing and ecological conditions at all levels. (Schneider et al, 2010 in Dittmer, 2013).

The banking sector (i.e. Commercial Banks) enjoys a nearly monopoly on money (i.e. deposits) creation (creating up to 95% of the broad money supply in England) (McLeay et al., 2014; Robertson, 2012 in Dittmer 2013). Because of the interest-bearing nature of credit creation, taking back control over the money creation is considered a prerequisite for monetary and fiscal policies to give priority to ecological sustainability and social equity (Farley et al, 2013).

Seyfang and Longhurst cross checked the goals of sustainable development with their typology (see figure). This highlight how a monetary innovation mechanism can be influenced by the values of the people promoting it. Clearly, service credits are generally more socially oriented than any other type of CC whereas Local Currencies and mutual exchanges are in between two objectives.

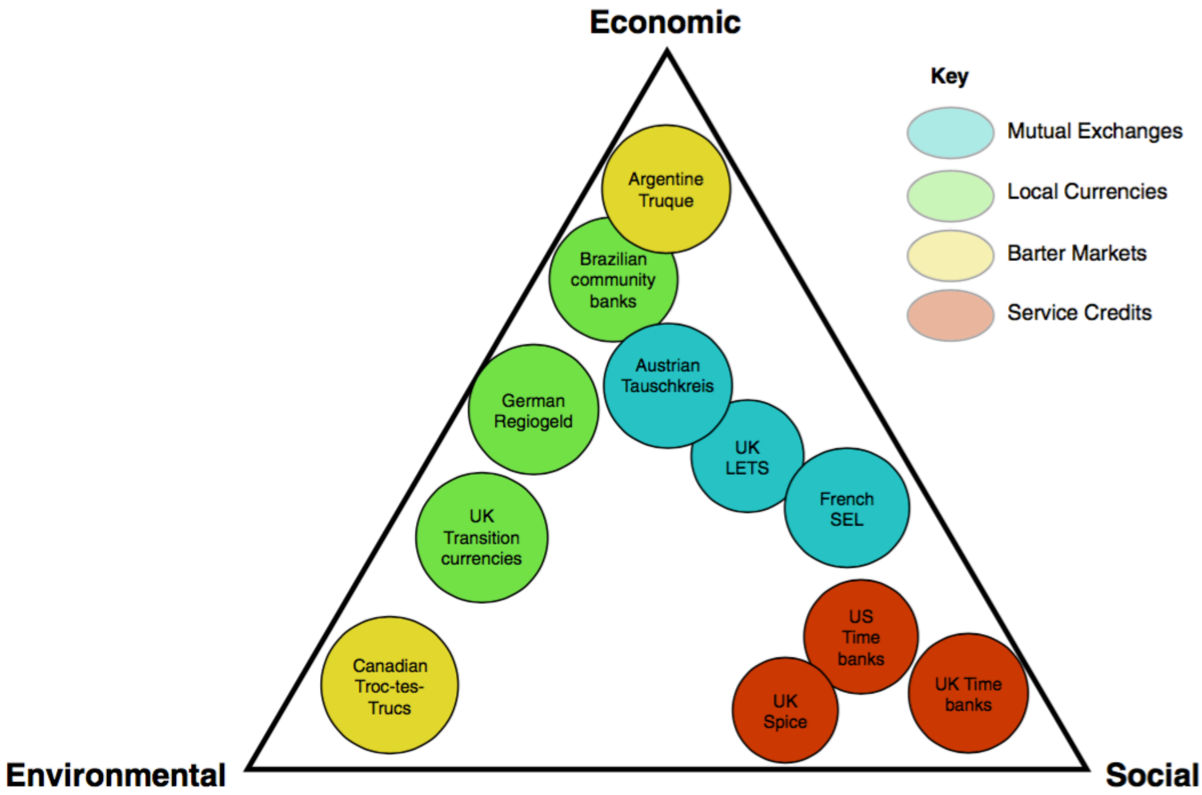


Figure 3: Mapping the sustainability objectives of CC

Source: Seyfang and Longhurst (2013) p73.

The above presented reasons and values are not a comprehensive list. There are as many objectives as there are CCs. The diversity of models makes it difficult to bound them.

Chapter 4: What is the CCs' impact?

Designing and wishing to change the world or more practically the community are the first steps. An important part is to know how impactful the enterprise is. Is it performing?

Observed Impact

Michel and Hudon (2015) show that there are some observable benefits to CC but there is no significant impact on local activities and economies. There is clearly a greater spending multiplier in digital currency systems in El Salvador reported by STRO although the impact is still negligible from macroeconomic perspectives (Groppa, 2013). CCs succeed in building and strengthening social capital but their success regarding economic benefits are diminished by their small sizes (Michel and Hudon, 2015; Kennedy, 2006).

Regarding localisation, Marshall and O'Neill (2018), in their comprehensive study, highlight the fact that CCs struggle to inflate real change and creating localisation. Nearly all producers are in the food and beverage industry and only one out of 27 respondents changed supplier following the introduction of CC. Growing the network to the regional level might be helpful and bring more opportunities to find and forge links between retailers, producers and suppliers. A way to so is to engage with municipal government and utility companies. Everybody needs to pay its electricity bill (Greco 2018). Stakeholders are comprised in a specific industry which cannot leverage enough the potential power of CC.

Furthermore, as long as there is freedom of capital flows and convertible CCs, there is no guarantee that CCs encourage local spending as it might just be a substitution of currency instead of substitution of product. Pacione (in Schraven, 2000) speaks of it as trade deviation without increase of the pie. It can only be desirable for small groups.

Marshall and O'Neill (2018) criticise the ecological goal of some CCs. Advocates put forward the improvement of the local spending multiplier but it remains a growth lead theory and is counterproductive when aiming at protecting the environment and lowering greenhouse gases or the ecological footprint.

For others, like Greco (2018), CCs have not yet succeeded in their prime objective that is achieving community resilience and self-reliance because of the lack of tangible data and critical size gained by CCs. However, for the moment, they remain a great tool to educate as it makes users aware that social support can be part of their lives if they become conscious of it (Nakazato & Hiramoto, 2012).

Finally, Dittmer (2013) believes the only way to induce change is lobbying for changing policies and CCs have only limited power until done so. There are unfortunately no clear success stories, besides to some extent the Chiemgauer.

Impact Assessment Tools

There has been a deficit of impact results coming from currency projects, resulting in a certain landmark examples being regularly drawn upon as proof of concept for others (NEF, 2015). In the literature, most of the reports are descriptive case studies without any impact evaluation framework (Schroeder, Miyazaki and Fare, 2011), the remaining often use qualitative research methods, some use quantitative methods and even fewer performance indicators (Place, 2018). With the potential and multitude of CCs, there is desperately a need for a standardised framework to assess their impact on the local economies, communities and environment (Michel and Hudon, 2015). A common, standardised tool for impact measurement would ensure the legitimacy of the field and open doors to compare CCs between them.

Purpose of Impact evaluation

There are 4 main reasons for the development of standardised impact assessment tools (Place, 2018; Place and Bindewald, 2015):

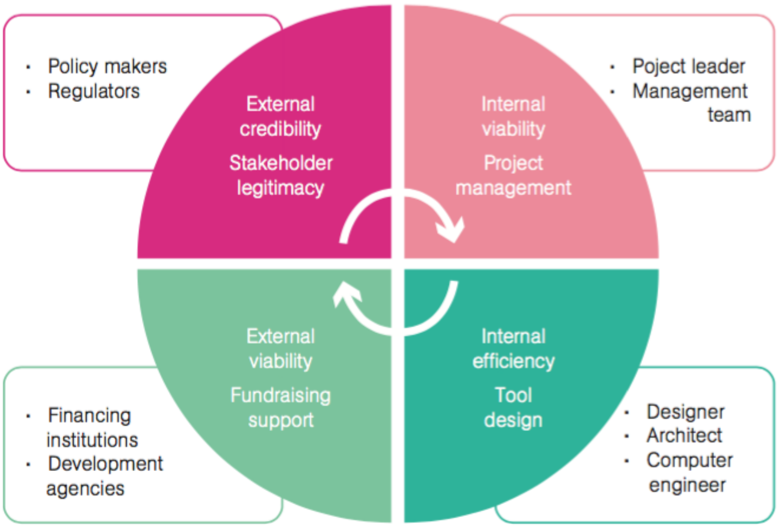


Figure 4 : Diagram of reasons for developing standardised impact assessment tools.

Source: (Place and Bindewald, 2013) cited by NEF (2014) p18.

First, in 2008, a study based on 165 systems in 28 countries found that up to 70% of CCs depend on external financing (Demeulenaere, 2008). Most of current CCs cannot rely on themselves yet. They cannot grow organically or secure capital by their own. This lack of viability results in the dependence towards public funding. For the institutions that are lending money to develop grassroot innovations, a counter-donation in the form of qualitative or quantitative information is implied. This information is crucial to assure their engagement has a socio-environmental impact on society and that their return on investment is positive.

Second, in order to develop and attract more participants, a CC needs to be credible. If it wants to attract potential users, it needs to show the added-value or the value creation of joining such system and the impact it will have on their lifestyle, community or society. It is a tool for building a reputation (GIIN, 2016).

Third, with an inward perspective, a standardised impact assessment tool can prove to be effective to improvement management and efficiency. Place and Bindewald (2015) distinguish 2 parts: Internal viability and internal efficiency. Internal viability has to do with the operational, structural and organizational aspects. It can also be a tool in order to realign the project with the stated objectives (GIIN, 2016).

Whereas the internal viability was more organizational, internal efficiency has to do with transaction costs and overheads reduction. It helps in resource allocations. The impact assessment tool can pinpoint areas of improvement and unlock value creation.

To achieve these goals, a standardised tool would make it possible to compare CCs between them and evaluate objectively their performance in order to implement and share best practices across the field.

Impact Assessment Framework Prototype

Now that the purpose of a standardised impact assessment framework is outlined, we are following with the theories on which Place's and Bindewald's prototype framework rely on and finish by the description of their framework.

The theory of change

The theory of change (ToC) focuses on mapping the missing link between what a program does (activities) and what the goal is (long term outcomes). By defining the long term goals/outcomes, we can identify conditions that must be fulfilled. Basically, what is the cause of the consequence.

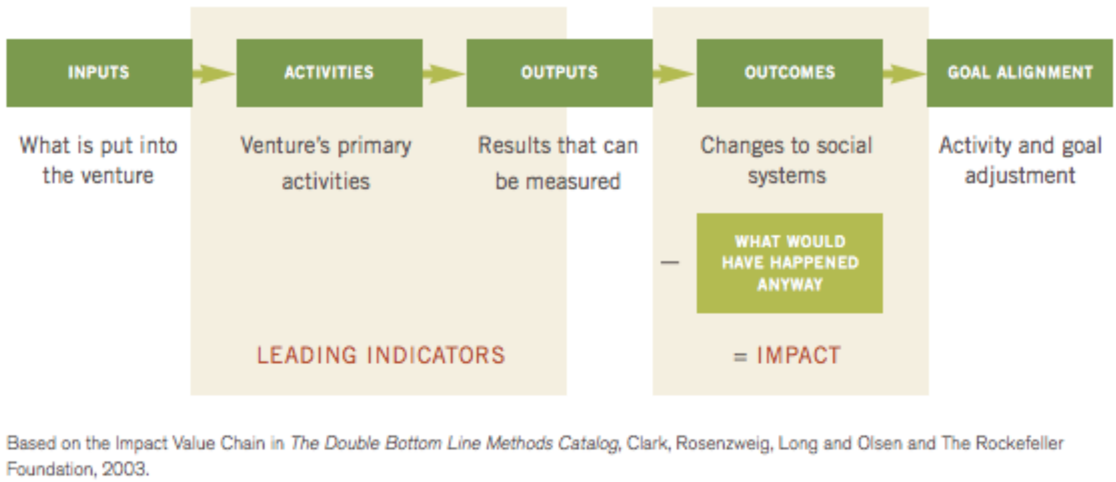


Figure 5 : Flowchart based on the theory of change

SOURCE: SVTG, 2008 p12

The theory of change results in a Flowchart diagram that illustrates what outcomes have been expected or achieved by an intervention whereas a logic model analysis which outputs of a project's program will lead to some outcomes of an organisation's mission (Place and Bindewald, 2015). The theory of change will have shown to be useful in different ways according to the point in life of the CC. For already implemented CCs, the ToC will induce a backward evaluation instead of a forward planning in the genesis of a CC (NEF, 2015).

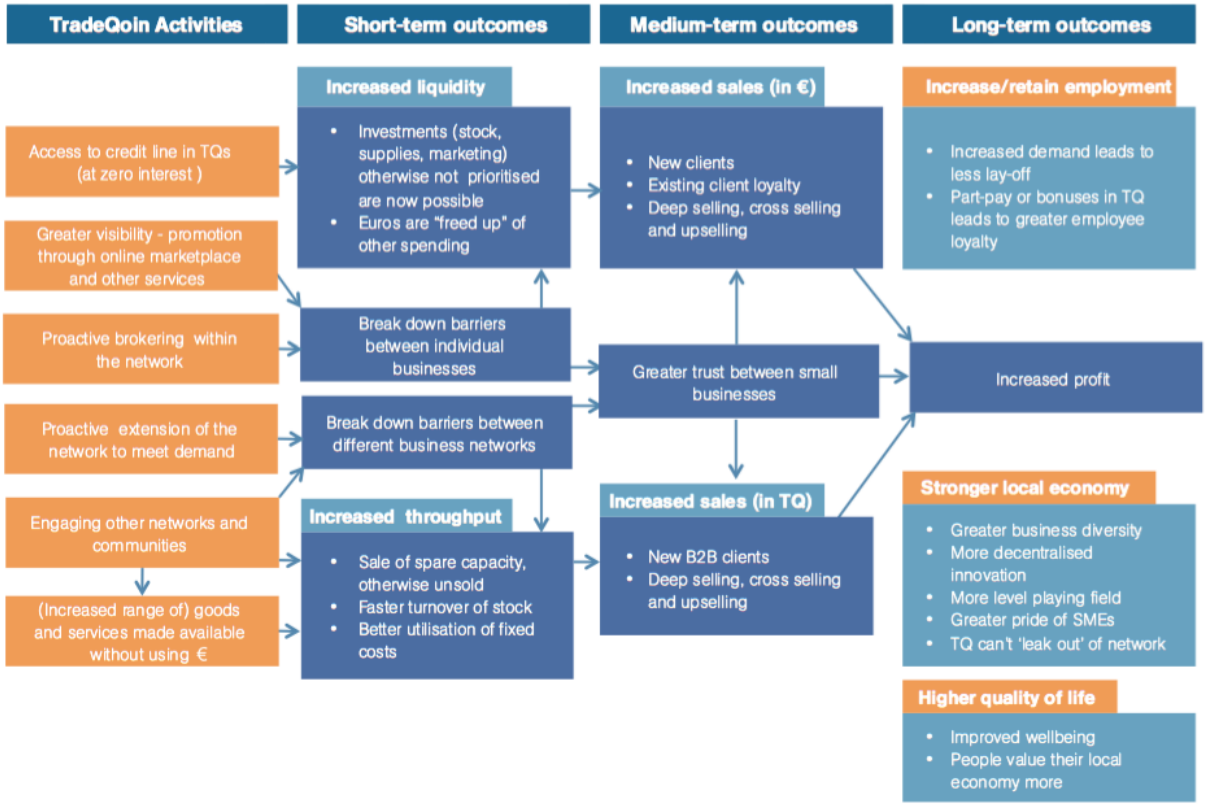


Figure 6: Example of TradeQoin flowchart

SOURCE: NEF, 2014 p36

As expectation management is one of the key success factors for sustainability of social niche technologies like CCs systems (Seyfang et al., 2012 in Place and Bindewald, 2015), ToC is a useful starting point.

Impact Assessment Matrix

An Impact Assessment Matrix (IAM) deals with reporting against indicators for set goals and objectives measuring the quantitative outputs of an activity and verifying the qualitative outcomes of a project (UPEACE, 2011 in Place et al., 2015). This method uses a dashboard or set of 71 indicators that are collected and analysed in a systematic way. The indicators can involve both quantitative and qualitative set of methods in several fields ranging from economics to the environment and therefore covering a wide range of domains.

The IAM Matrix is based on 3 ground approaches:

1) on the norms for evaluation proposed in the handbook on planning, monitoring and evaluating for development results by the United Nations Development Programme (UNDP, 2009: Page 130 in Place et al., 2015)
2) On the work of Furtado (2005 in Place et al.,2015) because of the need of cross disciplinary approach in order to cover a wide and as complete as possible range of domains.
3) Even overpassing former work by designing a transverse and integral approach taking into account more than rational data collection and assessment (Place et al., 2015).

The IAM Matrix cover the following categories (Place et al., 2015):

- Dimension: linked with scientific research domains in different background such as ecology (environment), sociology (social), economics (economy), politics (governance), anthropology philosophy and psychology (culture) to insure a cross disciplinary approach.
- Level: meta, macro, meso or micro
- Vision goal: see table below
- Guideline principle: main topic, issue, subject which might be integrated, followed and respected.
- Evaluation objective: see table below
- Typology: bilateral barter (B), multilateral barter (M), Mutual Credit (U), issued currency (C), Hybrid exchange system (I), or relating to any of these types (A).
- Logic Model hierarchy: measuring activities (A), outputs (P), or outcomes (C)
- Progress measurement against eco-socio-environmental indicators or different kinds.
- Monitoring and evaluation methodology: data collection and analysis with quantitative or qualitative research methods

- Cost: Estimation of the time, money and human resources needed for data collection: low (1), medium (2), high (3).
- Frequency of the data collection and analysis: daily (D), weekly (W), monthly (M), Yearly (Y).
- Link with standards and references (L): linked with sustainability assessment frameworks standards (1 to 3) and social and complementary currency evaluation research reference studies (A to D)
    - 1 - Sustainable Development Goals
    - 2 - Impact Reporting and Investment Standards
    - 3 - Global Reporting Initiative
    - A - Michel et al., 2015
    - B - Seyfang et al., 2013
    - C - Dittmer, 2013
    - D - Instituto Palmas et al., 2013

Culture	Meta	Societal acceptance	Recognition, credibility, legitimacy from (inter)- governmental institution
		Community	Tranverse cross-disciplinary integral holistic collective intelligence
	Macro	Inner/ outer sense harmony	Other oriented cooperation & self-oriented competition equilibrium
	Meso	Pluralism, inclusiveness, diversity, creativity	Alternative flexible libertarian measure of value
			Soft skills and hard skills design thinking
	Micro	Innovation, confidence, humility	Open questioning capacity
Governance	Meta	Participatory democracy	Collaborative election decision process: consent sociocracy
	Macro	Citizenship engagement recognition	Effective stakeholder involvement stimulation
	Meso	Independent control	Independent quality control process
	Micro	Monetary creation as common good	Open free code and legality
Economis	Meta	Crisis resilience	Sufficient currency tool constellation: diversity inter-connexion
			Appropriate socio-environmental accountancy scheme
			Efficient externalities internalisation
	Macro	Make exchange possible	Unsatisfied needs meet unused resources
	Meso	Inclusive community-building	Income, employment and activities generation
			Financial inclusion & credit clearing & social inclusion
			Local economic actor liquidity
	Micro	Financial autonomy development	Turnover, sales
			Client loyalty
			Purchasing power
			Value-added
Social	Meta	Link share reciprocity solidarity	Local, time and knowledge exchange
	Macro	Equity and justice	Public debt reduction
			Egalitarian or ethical value hierarchy
			Public services increase
			Social protection preservation
			Non-Speculative economy circulation
	Meso	Needs satisfaction	Informal primary livelihoods activities support
			Voluntary work valuation
			Keep wealth locally
	Micro	Cohesion cooperation sharing vector	Value co-creation process
			SSE network activation
			Consumer-producer link reinforcement
Environment	Meta	Transition and autonomy	Encourage territorial community: conurbation regional development
	Macro	Eco-localization relocation	Incentive to attract local producer and consumer
	Meso	Ecological footprint reduction	Eco-citizen behaviour incentive: consumption reduction, repair, reuse, energy saving, waste recycling, biodiversity rehabilitation, organic agroforestry, water conservation, ethical banking, sustainable investment
	Micro	Responsible consumption motiva- tion	Label network integration: Fair Trade, Organic products, Eco-friendly

Table 2 : Goals and Objectives for CCs

SOURCE: Place et al., 2015 p156.

Integral Approach

In 2018, Place updated the framework with an integral approach categorization with its four quadrants of an integral vision.

Non-dual	Interior Views	Exterior Mechanism
Individual Individua- tions	I Subjective Intentional and conscious (aesthetic, expres- sive) Existential reflection (stages of conscious- ness, cognitive and self-identity)	IT Objective Behavioral and organism (empirical, positivism) Neuro-behavioral science (stages of the psycho- body, organic and energetic)
Collective Institutions	WE Inter-subjective Cultural and world vision (ethics, norms) Critical reflection (stages of worldview)	ITS Inter-objective Social and environment (cybernetics, systems) Complexity economics (stages of system logic, so- ciopolitical and economic)

Table 3 : all quadrants all levels interconnections of full-spectrum economics.

SOURCE: Place, 2018 p78.

- Integral approach: Subjective or existential reflection (leadership and well-being), objective or neuro behavioural science (Hardware, software or material), inter-subjective or critical reflection (ethics and education), inter-objective or complexity economics (system design).

Place and Bindewald approach is incremental regarding the development of an assessment tool. The first step was with the theory of change. The second step added the Impact Assessment Matrix (Place and Bindewald, 2015). Finally, the third step added the integral approach and the link to reference studies (Place, 2018). This illustrates the fact that the framework is still at a prototype level and any recommendation and proposal that would broaden or improve the use of the framework can be added. Ultimately, it will be the way the framework is used by practitioners or scholars that will define it. The first "improvement" seen was by the author himself when he adapted the framework in order to analyse the impact of the Geneva currency (Le léman) in 2018. He added 3 features: Score, Justification and Recommendation. This way, he could analyse thanks to his own knowledge of the currency as an expert and master thesis supervisor. The complete framework is in the appendix p2.

Limitation of the framework

Concerning the use of a framework, Doria and Fantacci (2017) argue that those approaches risk to overweight a peculiar form of sociality which may emerge particularly in certain types of CC experiments. The analysis of CCs cannot be limited to the identification of different (Social, economic and political) aspects. There will always be a missing element in such standardized assessment.

On a more technical level, the only existing analysis for the moment as been done using an adaptation of the framework. Instead of using the proposed indicators on a regular interval of time, Place (2018) made his analysis based on his knowledge of the currency as an expert and supervisor of thesis about the CC adding 3 criteria:

- Score: 1 - Very Low, 2 - Low, 3 - High, 4 - Very High in order to represent a multifaceted matrix in a radar graphic.
- Justification: Comments, remarks, critics to justify the scoring (N/A for not applicable or not available).
- Recommendations: solution proposition to implement in a continuous improvement process.

This highlights already the time consuming work and planning part needed in order to use the framework to its full potential.

Part 3: Empirical Part

The second part of this paper is about analysing original data collect from 4 different cases within the bound of the prototypical impact assessment framework described above.

Methodology

As presented in the table, the methodology adopted is as following:

Firstly, the research questions and hypothesis are presented and explained. The parameters of the research are chosen and refined according to the context, activity or availability of the CCs as encountered on the field.

Secondly, the data is collected thanks to several sources: from online search to interviews depending on the context and availabilities.

Thirdly, data is compiled and analysed for impact assessment. Then a comparison is made between the impact assessments.

Fourthly, recommendations are made based on the whole process and results of the research.

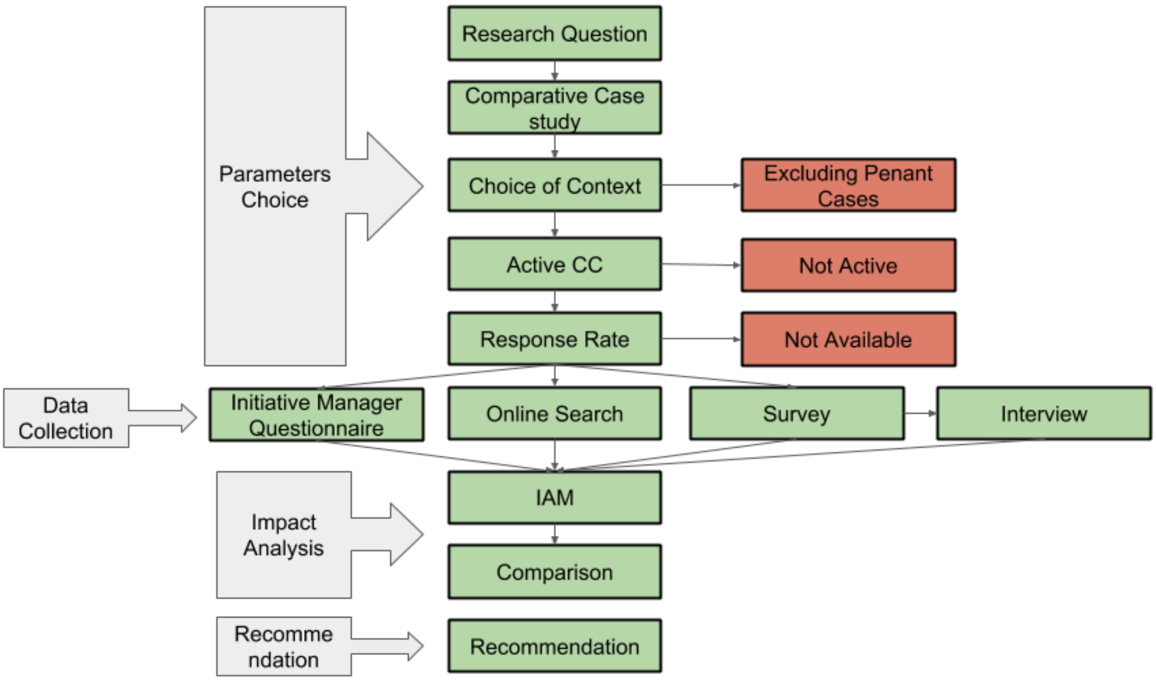


Figure 7 : Flowchart of the adopted methodology.

Chapter 1: Parameters Choice

This first chapter lays out the hypothesis of the research as the work is bound to Place's framework, Impact Assessment Matrix (IAM).

Research Questions

The first analysis of a currency through Place's framework was with a single currency (Hybrid between mutual credit and issued currency), the Léman, in 2015 when the CC was still in its genesis. Since then a review has been published in 2018 but remaining with result solely based on the author's expertise. Therefore, this research will focus on several currencies of different types (design and maturity). The present assessment is focusing on 2 research questions:

- To what extent have these CCs a socio-economic impact on their community?
- How effective is Place's impact assessment matrix (IAM) of community currency?

Comparative Case study

The methodology adopted is a cross examination of case studies. The research rests on the IAM where a specific case is under scrutiny and its impact analysed. The first step is to use a case study methodology. Furthermore, to put each hypothesis to the test, several cases are needed with each different characteristic. A comparative case study seems to be the most pertinent choice even though there are intrinsic limitations.

Choice of Context

A preliminary research of existing CCs is done using references from CC-literature, publication from the International Journal of Community Currency Research and a simple google approach.

CCs can mainly be found in Australia and New Zealand, Japan, the US and Canada, South America and Europe (especially: Belgium, France, Germany, Italy, the Netherlands, the UK and Spain). Nevertheless, some initiatives are also developing in Africa but have less media coverage or internet print: Grassroot Economics (Kenya…) and South Africa (CES, GEM Project…). According to Seyfang and Longhurst (2013), African CC systems only represent less than 1% of the existing CCS.

Italian, US and UK cases are ruled out. They are the high profile cases in recent academic literature. Most of them are pennant cases used to promote and defend the idea that CCs have impact on communities.

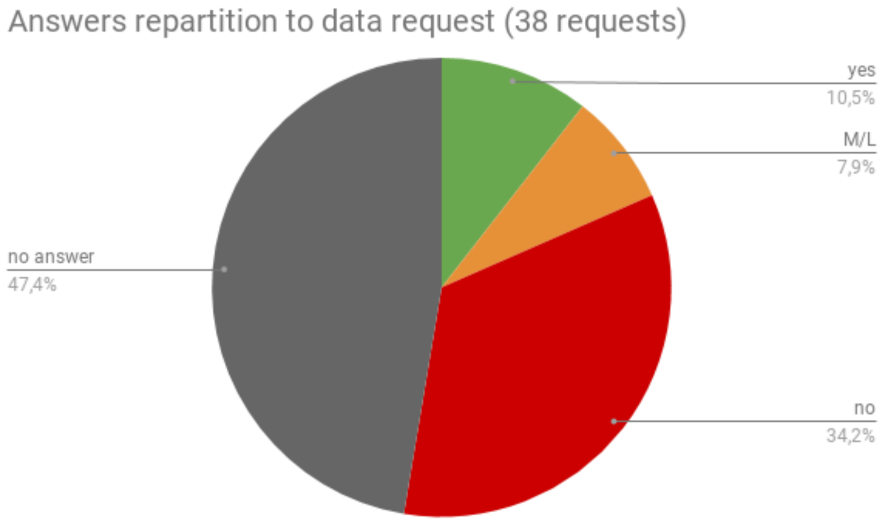
Therefore, contact is engaged preferably with Dutch, French and South Africans.
The French and Dutch CCs scene has been growing the past years without any major study seen on the international level.
South African CCs are chosen for 2 reasons. First, it is still a developing country which can brings diversity to the analysis. Second, South Africa is home of many different grassroot innovations and CCs or LETS.

Active CC

Without having any written records, many CCs are not active anymore. Taking a look at the website and last updates clears up any doubt of activity. Furthermore, 5 out of 13 answers stating the CC would not be available to participate in the research were because the CC was not active anymore.
Reasons are multiple for CCs to stop their activity. According to a German CC manager, German CCs seem to be on the decline and it is difficult to keep them afloat because of the soaring German economy. From a Spanish perspective, a manager shared that the legislation was one of the reason they stopped.

Response Rate

In total, 38 CCs have been contacted through different channels (Website, Email, Facebook). Response rate is slightly over 50%. Positive or open to question rate falls to less than a third of all answers.



Graph 1 : Answers repartition to data request

(M/L=More or less, time constraints in most cases)

Context-wise, it is clear that French currencies answered more than any other. As expressed by one Spanish contact, a probable reason is the language barrier with Spanish Currency managers because of the poor English literacy rate.

There are several reasons for the low positive response rate:

- Participating in a research is time consuming for people who are already volunteers
- Many currencies are inactive. In some cases, some volunteers keep answering.
- Some currencies are quite old and therefore already having strong partnership with universities. This happened mostly for French CC.

Impact Assessment Matrix

Initially, the IAM has clearly defined Progress Measurement indicators and assigned measurement and evaluation methodologies used at regular intervals. This aims at standardizing the evaluation of the impact regardless of the type of CC or its context.
To illustrate, let's take the present example: Indicator n°4: Improve quality of life. The goals or vision is to see, at the meso level, if needs are satisfied. The main guideline principle is the well-being of the individuals. How to assess that? One possibility is to evaluate the improvement in quality of life. To avoid bias and have a low cost

evaluation, the proposed methodology is an interview/survey done daily where the threshold is set as the percentage of persons who agree or strongly agree that their quality of life has improved.

This requires a long time planning, daily dedication and is very time consuming. In the present research, it was not possible to use it at its full potential and therefore adaptations were made. They are similar to the one from Place (2018) for the Geneva CC. Instead of following the frequency of data collection, a score from 1 to 4 (1 - Very Low; 2 - Low; 3 - High; 4 - Very High) and a justification criteria are added. Progress measurement indicators and Measurement and Evaluation methodology are followed as much as possible to keep the essence of the IAM but will be replaced in some cases by qualitative data.

Thus, to complete the 71 indicators of the IAM, the 4 ways of data collections are respectively by order of use: an online search, a questionnaire for Initiative Manager, a survey and interviews.

Online search

For the online search, all publicly available information about the CC creation and management is searched, mostly on their home website. This way a better understanding of the project is build and the next steps (vocabulary, questions…) can be adapted to the currency design and context. The online search is also used to create a database of businesses participating in the projects for later use to share the survey.

Questionnaire

As managers remain cautious and avoid sharing their databases, a questionnaire is given with requested information. In some cases, the questionnaire is pre-filled for managers to gain time by only answering the unanswered questions and clarifying pre-filled information.

Survey

Depending, on the design of the CC, 2 types of surveys are potentially used. The main survey is oriented towards user. The aim of the surveys is to collect information regarding the use and the effects on the user's behaviour, quality of life, etc.
A second lighter survey is oriented towards businesses to understand how they use the CC, how the CC flows in the supply chain. In the case of barter, mutual credit and equivalent types of CCs, where all actors on the market are "prosumers" (Producers and consumers), the business survey is irrelevant.

Interview

In some cases, a survey is not possible. For instance, South Africa has a law that prohibits from sharing customer's/user's data to third party whereas for many French currencies, they already share a lot of information with their participants. They do not wish to overload them as they don't want to scare them off. In those cases, instead of conducting surveys, qualitative data has been collected through interviews.

Chapter 2: Data Collection

In this section, the different case studies are presented in order to get a big picture of their aim and characteristics for later impact assessment.

The Florain

Origin: Nancy, France

Typology: 4th generation (or neo-SOL) / Local Currencies

Age: Launched in 2017

Users: 500

Businesses: 88

Quantity in Circulation: 36’000 Florains (1F = 1€)

Aim:

- localisation of the economy
- Use non speculative currency and take money back in control
- preservation of the environment
- promote the human factor
- Act for a society that has more solidarity
- create a pool for developing new ideas
- promote responsible consumption

Description: Users and Businesses have to join the organisation. The Florain is a paper currency. Users can convert euros into Florains but not the other way around. However, businesses are authorized to convert Florains back into Euro by paying a fee of 5% or a fixed fee in case they are at the end of the supply chain. When joining businesses have to take on a challenge to lower their carbon footprint.

Data Collection:

- Initiative Manager Questionnaire
- User Survey
- Business Survey (provided by the organisation)

The Cairn

Origin: Grenoble, France

Typology: 4th generation (or neo-SOL) / Local Currencies

Age: Launched in 2017

Users: 1050

Businesses: 171

Quantity in Circulation: 53’000 Cairns (1C = 1€)

Aim:

- Support the local economy
- Promote trust and mutual aid
- Support the Energy transition
- Give the opportunity to citizen to get involved in the governance
- Boost local economy and resist to speculation

Description: Users and Businesses have to join the organisation. The Cairn is a paper currency. Users can convert euros into Cairns but not the other way around. However, businesses are authorized to convert Cairns back into Euro by paying a fee of 2%

Data Collection:

- Initiative Manager Questionnaire
- Business Survey
- Interview

The Gonette

Origin: Lyon, France

Typology: 4th generation (or neo-SOL) / Local Currencies

Age: Launched in 2015

Users: 1600

Businesses: 280

Quantity in Circulation: 120’000 Gonettes (1G = 1€)

Aim:

- Support the real economy instead of the financial
- Support local economic actors
- Strengthen community resilience and boost local economy
- Transfer money to ethical banks
- Reclaiming action and governance
- Educate people
- Create a directory for actors of the transition
- Promote interpersonal exchanges/solidarity across the network

Description: Users and Businesses have to join the organisation. The Gonette is a paper currency. Users and businesses can convert euros into Gonettes and are authorized to convert Gonettes back into Euro.

Data Collection:

- Initiative Manager Questionnaire
- Business Survey

The GEM Project

Origin: South Africa

Typology: 1st generation (with adaptation) / positively balanced service credit

Age: Launched in 2015

Users: 10219

Non Profits: 44

Total issued: 358’468 GEM (1 GEM=1 Rand)

Aim:

- Uplift disadvantage communities
- Promote active citizenship
- Improve communities

Description: The GEM-Project (Going the Extra Mile) is a platform that matches volunteers and organisation. It rewards volunteers for their time when participating in activities thanks to private fundings. It works with either an app or USSD. Registration is free.

Data Collection:

- Initiative Manager Questionnaire
- Interviews

Name	Origin	Date	B-type	S&L-type	Quantity in circulation/Spent	ITW	Manager Questionnaire
Florain	Fr	2017	4th	LC	36'000	N/A	Yes
Cairn	Fr	2017	4th	LC	53'000	3	Yes
Gonette	Fr	2015	4th	LC	120'000	N/A	Yes
GEM Project	SA	2015	1st	SC	358'468	4	Yes
	# users	# Users Answered	Users Survey RR	# Business /partners	#Business Answered	#Business contacted	Business Survey RR
Florain	500	74	15%	88	25	88	28%
Cairn	1050	N/A	N/A	171	29	103	28%
Gonette	1600	N/A	N/A	280	77	229	34%
GEM Project	10219	N/A	N/A	44	N/A	N/A	N/A

*Survey Response Rate (RR) = Total response/Total contact information

Table 4 : Summary of CC information collected

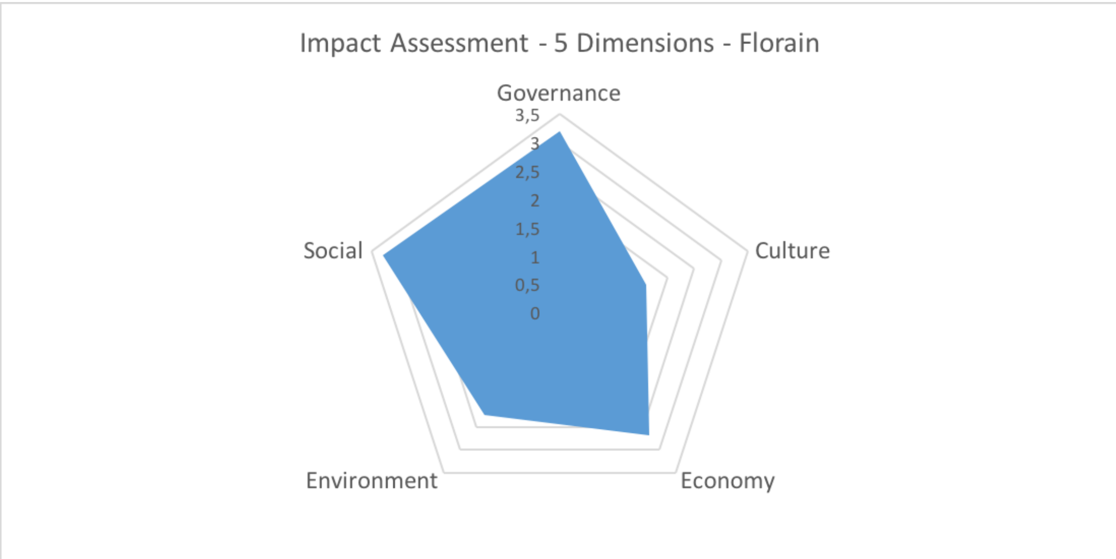
Chapter 3: Impact Analysis of the 4 cases

In this section, the results of all impact analyses are presented. For the complete IAM, see the last section of appendix.

For each CC, two radar graphs are produced. One represents the integral approach. The other represents the 5 dimensions. The graphs are a way to evaluate the coherence of the analysis by comparing the results to the stated objectives of the CC.
On the radar, for each dimension/quadrants, the mean of the used indicator is used. As the amount of indicators per dimension is not the same, the mean is more relevant than the sum.

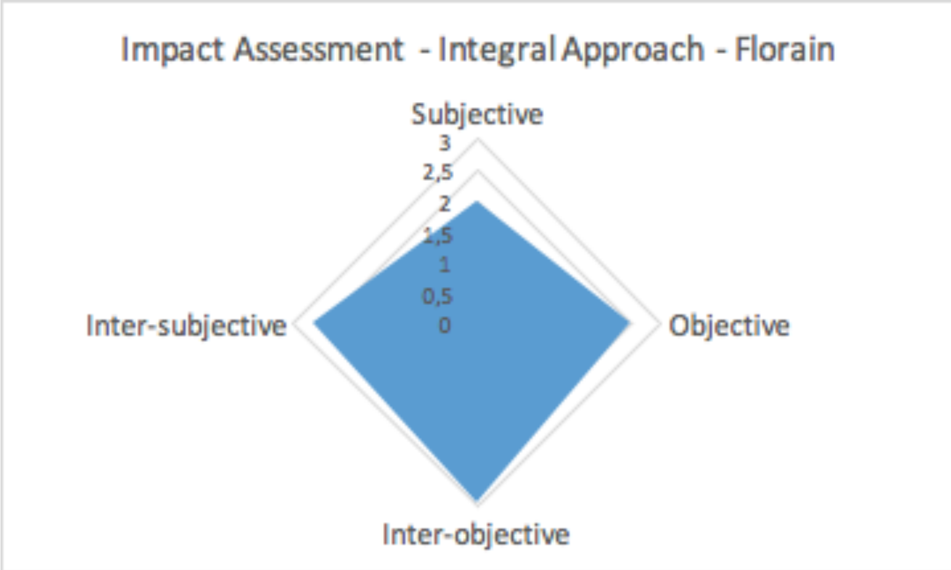
The Florain

In total 40 indicators (56%) have been used for this analysis.



Graph 2 : Impact assessment of the Florain regarding the 5 dimensions

The radar graph 2 shows that the Governance and Social dimensions are more prominent than all others as well as having a high score. They have a high impact on the community around the Florain. Those are in line with the stated objectives of promoting the human factor, act more solidaire and the sociocratic methodology used. However, all others have quite a low impact according to the framework. The cultural dimension is especially low. Despite its economic orientation (i.e. Localisation of the economy), the Florain has not yet achieved a high impact on its community. A possible explanation could be that the users and businesses have not yet enjoyed the full extent of opportunities because of its young age. The Florain is still in a developing phase. Since the start of this study, new businesses joined the network which offers new opportunities for existing businesses as well. Furthermore, the initiative manager wondered if the Florain was a good study case despite of its young age. He wondered if result would be relevant as the Florain is not yet fully implemented.

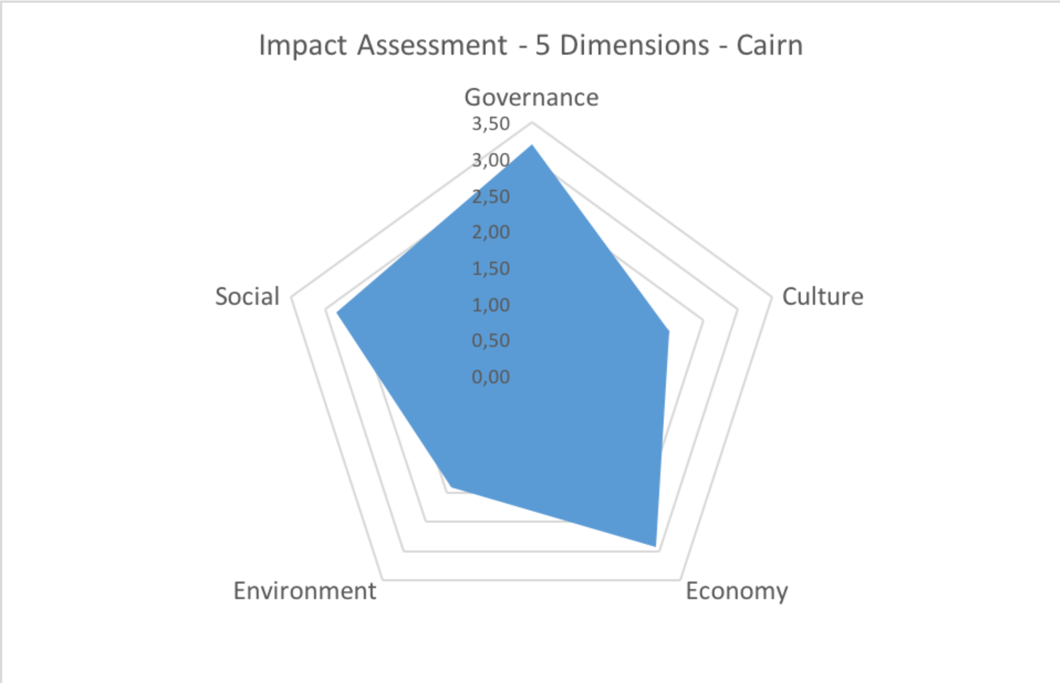


Graph 3 : Impact assessment of the Florain regarding the 4 quadrants of the integral approach

Regarding the integral approach, inter-objective and inter-subjective quadrants are high and very close to each other. The Florain's vision is oriented towards shared ethics and norms (Critical reflection) and the construction of a society that is more solidaire. Nevertheless, the subjective quadrant is lower and poorly represented with only 2 indicators are used.

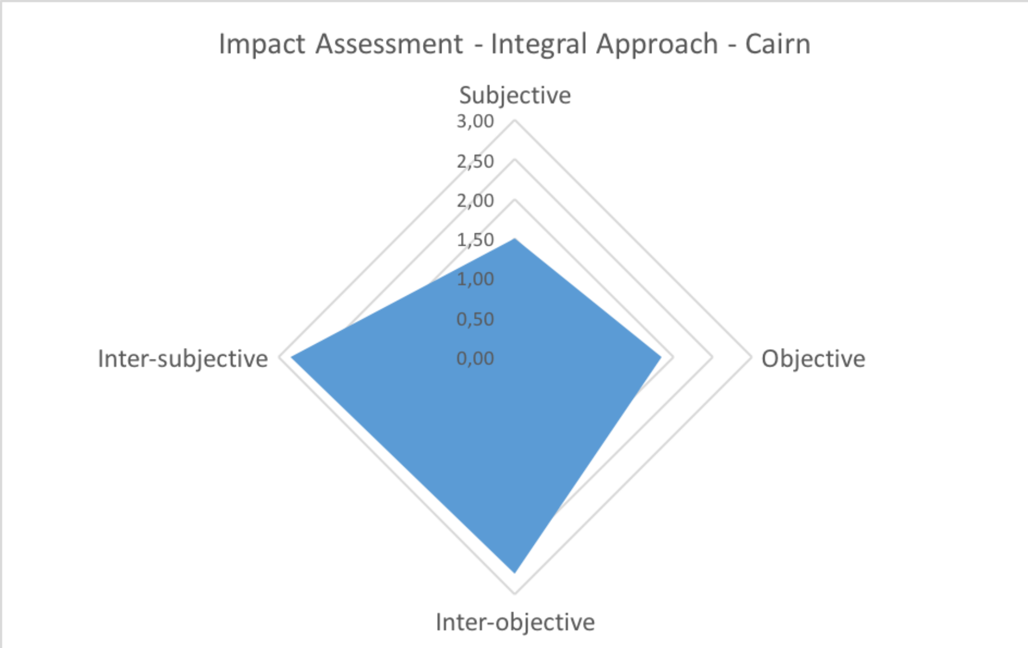
The Cairn

In total 39 indicators (55%) have been used for this analysis.



Graph 4 : Impact assessment of the Cairn regarding the 5 dimensions

The value proposition is very close to the Florain's one. Both have been launched around the same time with some differences in design and in size (Cairn is bigger). Therefore, there is no wonder that the 2 arrive at the similar conclusion and about the same impact on their respective communities. However, the cairn has a greater impact in supporting and boosting its economy which is in line with its aim. A potential explanation could be the network size of the Cairn which is nearly twice as big as the Florain.

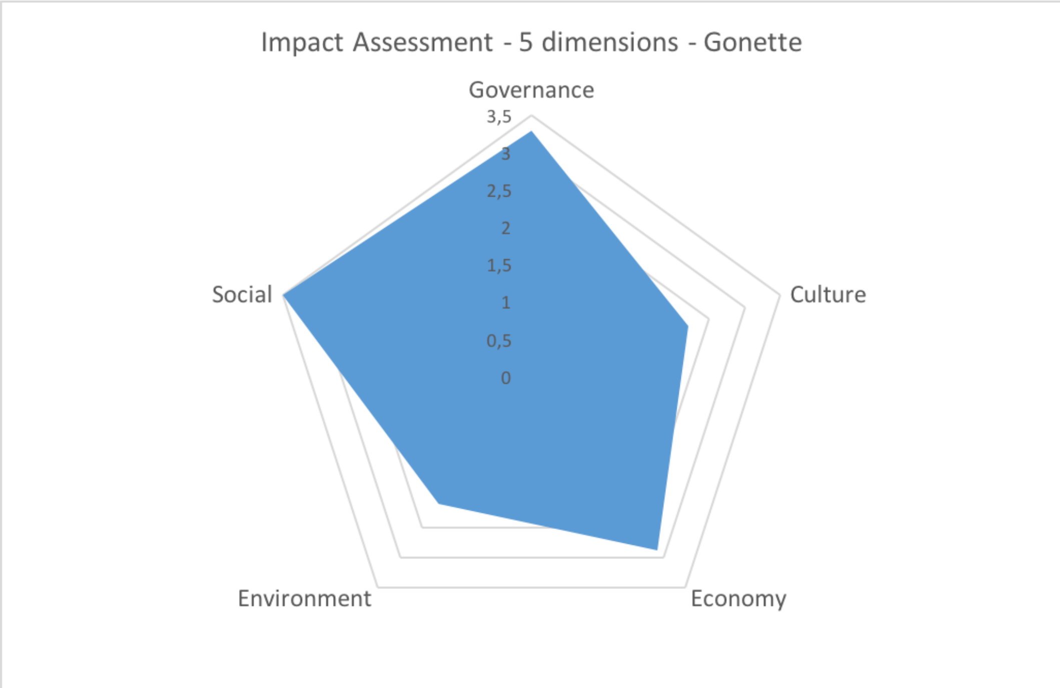


Graph 5 : Impact assessment of the Cairn regarding the 4 quadrants of the integral approach

However, when looking at the integral approach, the scores tend draw a clear trend towards community. Whereas the Florain has similarities regarding the community, the Cairn seem to "neglect" the individual. Nevertheless, the value proposition is in line with the assessment.

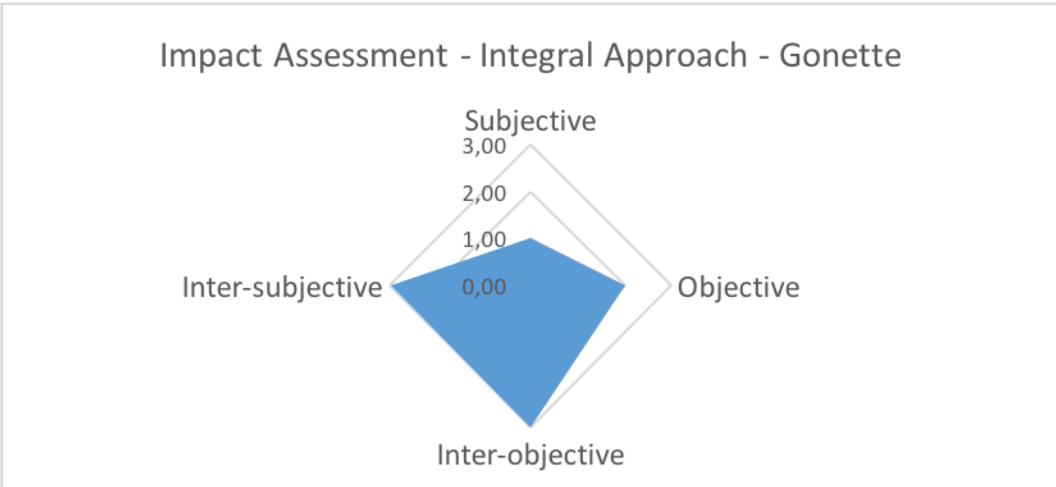
The Gonette

In total, 40 indicators (56%) have been used for the impact analysis of the Gonette.



Graph 6 : Impact assessment of the Gonette regarding the 5 dimensions

Again, the 3 French currencies show similar trends/shapes. The Gonette being the oldest of the 3, its impact assessment is slightly higher on average.

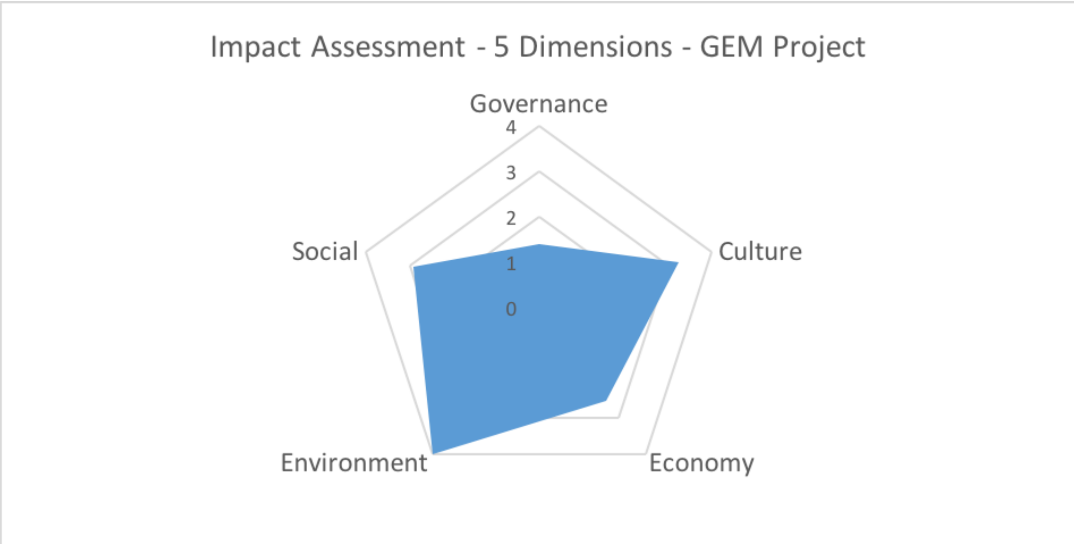


Graph 7 : Impact assessment of the Gonette regarding the 4 quadrants of the integral approach

The same idea appears here where objective and subjective are lower rated. However, this is due to the both the data collection and the framework. The former is due to the lack of interview opportunities with users. The later will be more develop at the end of the chapter and is the product of unbalanced amount of indicators for the type of currency.

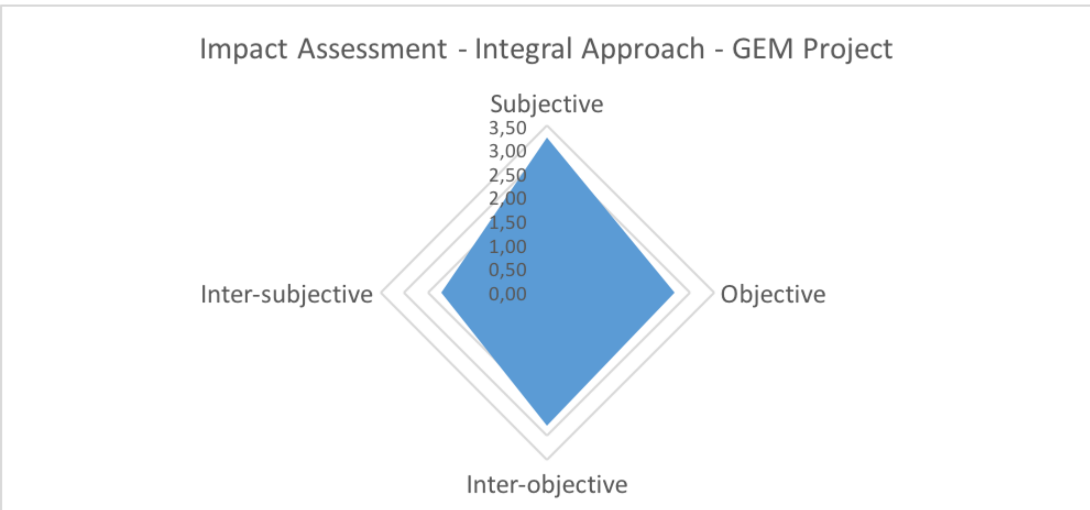
The GEM Project

In total 34 indicators have been used for this analysis.



Graph 8 : Impact assessment of the GEM Project regarding the 5 dimensions

Unlike the French CCs, the GEM project takes the opposite road by focusing on the cultural and social aspects. Due to its economy and social structure, the economic dimension is non negligible. As stated in interviews, even if the reward gained in GEM can seem low from a middle class perspective, for lower class students it is like an allowance offering many possibilities from buying airtime for their phone to going to the movie. However, governance is out of the picture in the value proposition and the score reflects that. Regarding the environmental dimension, it is not sufficiently backed by indicators to be trustworthy.



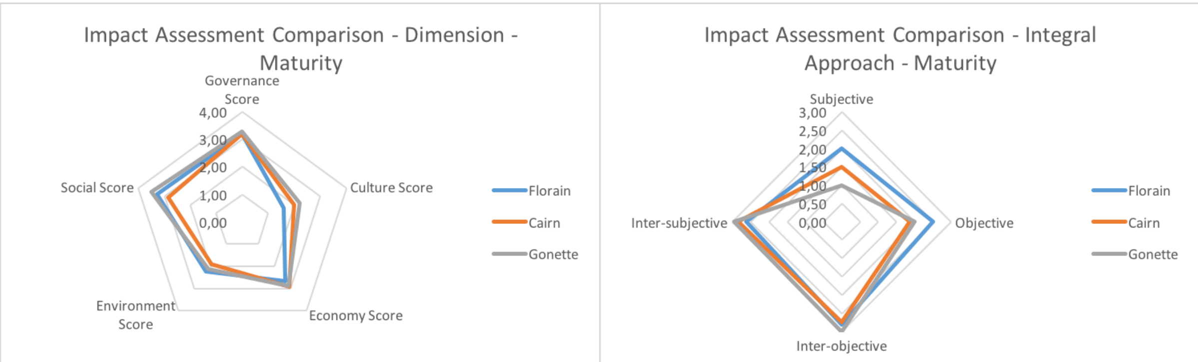
Graph 9 : Impact assessment of the GEM Project regarding the 4 quadrants of the integral approach

The GEM project is once again going the opposite way. It is definitely more balanced with a preference towards the individual. This is due to the design of the CC which is rewarding volunteers for their work.
Generally speaking, the analysed cases do have impacts on their communities which are in line of their aims. However, the economic benefits seem to be the hardest to achieve with the least perceived impact on the community.

Cross examination of efficiency

In this section, we are going to take a step back and look at the general results of all impact analysis to take a look at the IAM.

Maturity of the CCs



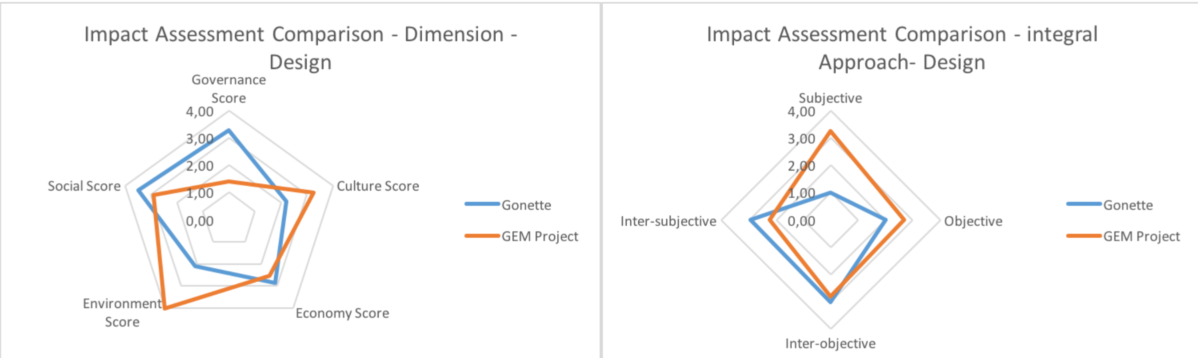
Graph 10: Comparison of Impact assessments between same design but different maturities

When looking at graph 9, there is a clear similar shape. The Gonette is on average slightly higher but the cluster remains very close. However, there is no significant difference under the maturity or age perspective.
For the integral approach part, the subjective quadrant is very dispersed because the amount of indicators is too low for it to be relevant.
Even if from a number perspective, the difference is not perceptible. As the Cairn interviewee 3 said "Its effects on me are marginal. It did not revolutionize me." Under the present hypothesis, the maturity has not shown to restrict the use of the framework. Nevertheless, checking indicator on regular interval might be refine result by show evolution of perspective rather than a singular point in time perspective.

Design of the CCs

On top of different maturities, 2 generations of CC have been analysed: GEM Project (1st Gen or Service Credit); Gonette (4th Gen or Local Currencies). The number of indicators used for the 4th generations is higher but the 1st generation still has a sufficient amount of indicators. Therefore, besides having a less refined final results, it makes no difference in the conclusion.

The impact analysis is very different as noticed above due to a difference in value proposition and design (see Graph 10). For example, 1st generation use more "subjective" (Integral Approach) indicators. Even though, used indicators are different, most remain in common (25 out of 34 indicators are in common with at least 1 other currency) and analysis seem to be coherent with the respective value proposition. The conclusion is that the IAM succeeds in capturing the diversity of CCs.



Graph 11 : Comparison of Impact Assessment between different designs

Integral approach

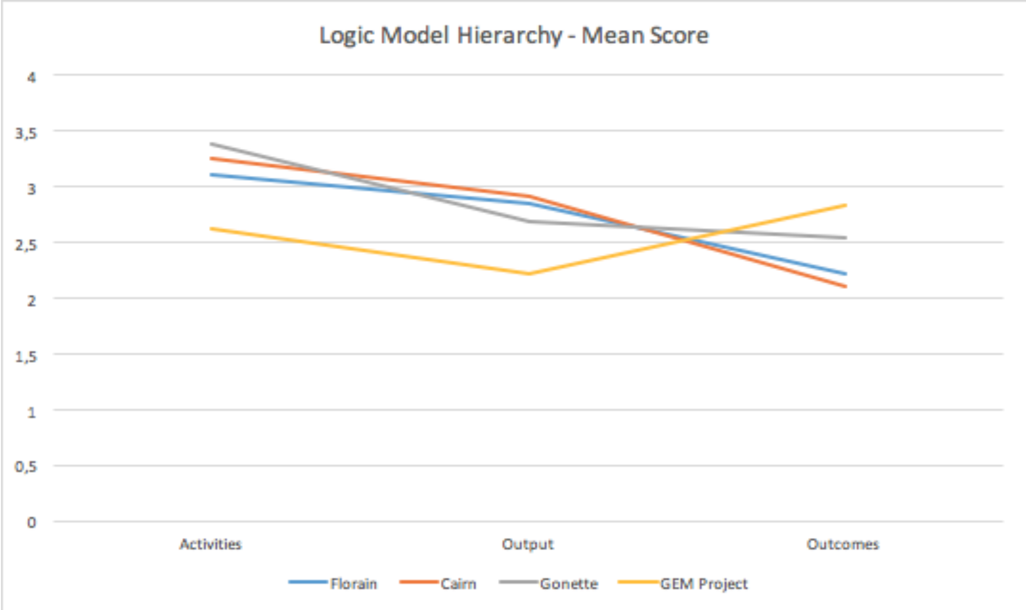
In the summary table 5, from the integral approach, the "I" or subjective quadrant is poorly represented in 4th generation CCs. As a matter fact, out of the potential 5 indicators, only 2 can be applied to 4th generation currencies. On a general perspective, "Community" oriented indicators (inter-obj/subj) make up the vast majority of the indicators. This limits the comprehensive perspective of the framework.

	Subjective	Objective	Inter-objective	Inter-subjective
Florain	2	6	15	18
Cairn	2	7	12	19
Gonette	1	7	12	21
GEM Project	4	3	15	13

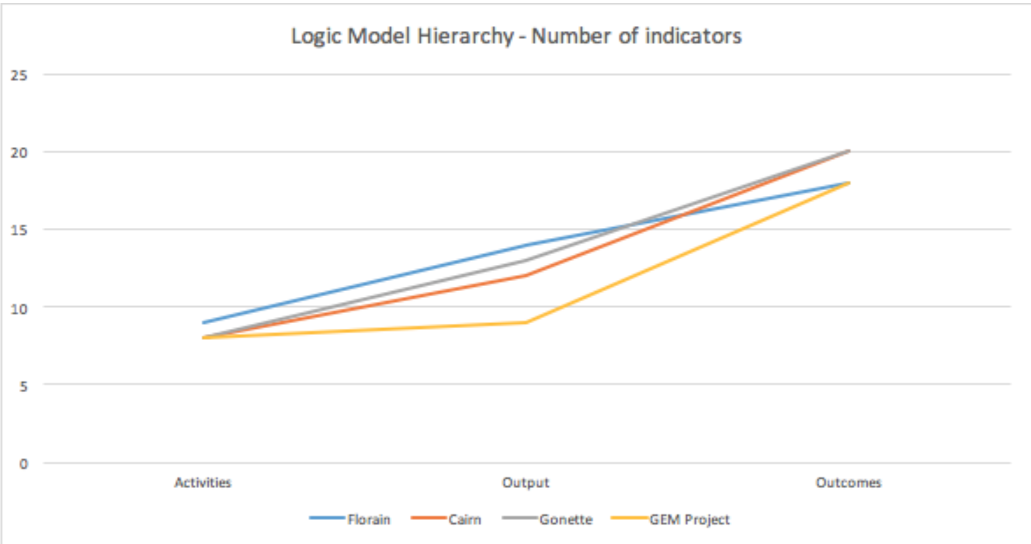
Table 5: Integral Approach : used indicators

Logic Model Hierarchy

Graph 10 represents the means of the indicators used according to the theory of change and logic model. Activities (ei the design of the CC) are generally for each CC analysed higher than the output or the outcome. Activity based indicators are measured *a priori* on design implementation. It is an indicator where evaluation is based on prior work used as best practices. For instance, it seems that demurrage is increasing velocity of a currency but the level or rate of demurrage seems not to influence usage or velocity (Godschalk, 2012). Then, depending on the choice of the currency managers, they might either choose to attract more people by not complexifying design with the use of demurrage or emphasize the velocity by using demurrage. The outcome being the measured impact of the CC, it should be the category that influences the most. The measure of improvement of quality of life is a measure of outcome. However, taking a look at the proportion of indicators used, activities only represent 20% whereas outcomes are nearly 50%. So the contribution of outcomes to the general analysis is more important and closer to the impact of the CC. Thanks to using more outcome indicators the value of activities is counterweighted.



Graph 12 : Logic Model Hierarchy - Mean of indicators



Graph 13 : Logic Model Hierarchy - Number of indicators

Chapter 4: Recommendations

General Recommendations

Database of active CCs

When researching for available study cases, the first issue to overpass was finding active CCs. There is no central database which registers active CCs. Even though, a database existed before, it is crucial to have an overview of the existing projects to help and support new initiatives as well as to create exchange between communities.

One of the purposes of the impact assessment is to find out areas of improvement. However, even if the impact assessment of its own CC can help pinpoint them, other CC's IAM, other study cases can help to spread best practices too. Creating a compendium of cases is a clearly stated objective of the framework's authors.

Adding to this objective, I strongly believe that giving quantitative landmarks for CCs would offer a complementary help. Initiative managers will have a better insight on how to develop their project and assess it if they have contextual information of other CCs (Demography, Area size, Population, Culture…) and evolution numbers: Hours worked on a project, number of Users etc. These quantitative landmarks would be useful for managers to have rational objectives as any enterprise would have when doing a benchmark. Academic CC-literature is abundant, however the practical knowledge is thinner and seems to be more on a word-of-mouth base.

Failing CCs

In the CC-literature, a striking point is the lack of studies on why CCs are failing or would fail. There is no studies on the aftermath of a CC and why it suddenly stopped. Is it financing? Is it motivations? Is it lack of workforce or legal meddling? There is no way to know the "why" it stopped or even just to know if a CC still exist as websites are still up.

In the current state, the field of CCs seems to be very positive oriented in the sense that researches are oriented towards how to develop, what is the perfect context, what are the success factors. However, Batterink et al. (2018) encourage people to record the lessons they learned from struggles they endure in order to invigorate the community of CCs practitioners. Getting an insight on why a CC is abandoned or failing is very important for new CC initiative to work on fertile grounds instead of starting from scratch and making the same mistakes. It is a way of avoiding problematic cornerstones.

Cryptocurrencies

Cryptocurrencies and especially Bitcoin have made the news for the past year. As stated earlier, the aim of the creator is clearly to get rid of a financial system, change paradigm and avoid large transaction fees. In that a parallel can be made with CCs in general which often rely on external financing. On top of that, as a peer-to-peer system, the governance of cryptocurrency is at the centre of their value proposition.

Considering GEM is already an electronic currency, many LETS or mutual credit work with program developed by Community Exchange System (CES) or Cyclos by the STRO organisation and local paper currencies (as analysed in the present paper) are trying or thinking of going digital. As Cairn Interviewee 3 said: the digital currency can be very helpful to business which have need for large amount of currency transaction and to user in order to avoid opening hours for currency exchange.

Therefore, it would be interesting to research the opportunities in the Blockchain technology and its peer-to-peer methodology to develop electronic version of local currencies.

Framework recommendations

Relevance of indicators

From a personal perspective, I believe that some macro and meso indicators are not yet relevant and depend on the size of currencies which is not yet obtained. Taking as an example indicators #10 Greenhouse Gases Emission (GHG) at Meta level: The lowering of GHG is clearly negligible when comparing the size of the CC's population to the general regional population which represents less than 0,01% of the regional population. Such an indicator cannot be measured with regional or external databases.

New indicators propositions

On a general perspective, as written above, a better balance between indicators would be interesting. Regarding the integral approach, subjective and objective quadrants represent only 15 out of 71 indicators. Intersubjective indicators represent 35 out 71 indicators. For more refined results, it would make sense to balance more the amount of indicators.

On top of that, hereafter, are some propositions of new Progress Measurement Indicators:

- Debt and external funding levels; 70% of CCs depend on external financing (Demeulenaere, 2008). Thus, political shift represents a risk as funding can be lost abruptly. The same example can be seen with private fundings. GEM had to withhold payment for a month because of a lack of sponsors or working capital. CCs will be more impactful if they find a sustainable funding. On the contrary, French CCs are funded with their entrance fee or the exchange rate.
- Frequency of use of CC: or Velocity is a measure of interest. It should be complementary to the outstanding converted CC as one of the objective of Local Currencies is to boost local economy. Therefore, on one side, the CC should not be sleeping and on the other side, the CC should be spent more than the national currency.
- Multitude of objective communicated: Unlike the common sense would make it believe, CCs with several objectives (e.i. motivations to develop the CC for volunteers and users) tend to be more successful. The explanation comes from the fact that a focused CC limits the pool of potential participants (Fesenfeld et al.,2015).
- Entrance fee: As a French business said (Cairn Interview 2), the participation fee for businesses is quite high and could rebuke in some cases. Even though, it is a way for the currency to fund itself and it is also a barrier for businesses.
- Exchange bureau: Cairn Interview 2 confessed that he did not use often the Cairn because of the time it took to exchange the currency and also because of the time to register personally. Talking to GEM interviewee 4, he also highlighted how easy it was to use the GEM. Therefore, it would be advised that the number of exchange bureau/places becomes an indicator as it limits the use of the currency.

This is not a comprehensive list but it aims at challenging the framework and relevance of indicators by offering alternative solutions.

Embeddable IAM version and guidelines

First, the IAM should be integrated into the normal operations of the currency. For example, French CCs could integrate a yearly survey when registering and paying the yearly participation fee. GEM project could put a survey that unlocks the GEMs of the awarded for the month. On one hand, the indicators would take increases into account instead of singular points in time. And on the other hand, the response rate would be higher and information more reliable. This requires also to have a lighter version of the IAM. One that does not require daily dedicated resources.

Furthermore, the IAM should have first, clear guidelines and second, adaptable templates of surveys. The IAM is quite a complex mix of theories and indicators which range from very practical to more abstract indexes. The author does not refer the special indexes in some cases. For example, no products categorization or ethic charts evaluations indexes are provided. The IAM framework is at the crossroads of several fields and requires some expertise to fulfil properly. If the aim is for CCs to use, the references of those framework and guidelines should be provided to CCs managers which are in many cases volunteers. Second, to ease the work for CCs managers and use the framework as intended template of surveys should be provided. In order to avoid a subjective bias when filling in the framework, clear templates of user or business survey could clarify grey areas.

Part 4: Conclusion

Most studies in the field of Community Currencies have shown to be descriptive and qualitative impact assessments. On top of that, only 2 attempts to create an assessment framework has been seen. Therefore, the present research aims at assessing the impact of 4 Community Currencies through the lens of the latest standardized framework and create a first directory of impact analysis.

Money is a tool that is so embedded in society and relations that it reflects society's values. Therefore, money has the potential to become a vector to induce change especially in the context of sustainable development for which it is already a tool. Economic sustainability is the most obvious reasons put forward by CC advocates (Rejection of a system, localization…) but are not the only. Social sustainability (community building) or Ecological sustainability (Environmental protection, degrowth…) are integral parts of most Community Currencies value propositions.

As the Community Currencies are not a new trend and exist under several forms for several decades now, impact analyses have already been made with mixed results. The potential is there but results are lacking. With the present standardized framework research, results are added to the current compendium to enrich it with more cases. The standardized framework purpose is to help CCs to secure funding by offering tangible sources of meaningful impact measures; to give a way to improve management and better alignment with objective; to offer a mean of attracting more participants by showcasing added-value.

This research focuses on a comparative case study of 4 CCs. Results of their impact analysis show a high impact in the governance and social dimension for French Local paper currencies; and in the culture and social dimensions for the GEM Project. However, their economic benefits are still generally shy compared to their stated objectives.

Regarding the framework, it holds up with 1st and 4th generations currencies as well as with different maturities. However, the indicators types are unbalanced (lack of subjective quadrants under the integral approach) limiting the frameworks reach.

Nevertheless, some limitations are to be kept in mind due to the data collection and the case study format of the research. Therefore, in order to work properly, it is advised for the framework and the impact analysis to be integrated in the development and operations of the CC. The tool will be more reliable with more accurate results if carried out all along the process of creation. Furthermore, templates and guidelines should be provided in order to help and decomplexify the framework for broader use by CC managers, volunteers and non-academic.

This research contributes to the literature in 3 ways: First, in offering to analysed CC insights on their impact; Second, on creating a compendium of cases as examples for new initiatives; Third, in giving insights on further development of the framework.

Many studies search for key success factors or how to develop a successful and impactful CC. However, failing factors are not analysed. It would be interesting and helpful for CC managers to be informed of the missteps or critical issues that make the CC unsuccessful and should be avoided.

Eventually, as promoted by the author of the framework (Place, 2018), it is important to continue analysing cases through the IAM. First, new cases will help building a better framework in order to better balance and relevant indicators and take into account the diversity of the field. Second, it will create a database of cases which can be used to derive success factors and offer guidelines for future initiatives development.

Bibliography

Association Le Florain. http://beta.monnaielocalenancy.fr/ consulted on May, 19th 2018.

Blanc, J. (2006). Local Currencies in European History : An analytical framework. Monetary Regionalisation. Local currency systems as catalysts for endogenous regional development. International scientific conference, Sep 2006, Weimar, Germany, Bauhaus Universität, 2006.

Blanc, J. (2011). Classifying "CCs": Community, complementary and local currencies types and generations. *International Journal of Community Currencies research*, 15 D, 4-10.

Brash, D. (2000). The pros and cons of currency union – a reserve bank perspective. https://www.bis.org/review/r000523a.pdf Retrieved on May 30, 2018.

Bunjaku, F., Gjorgieva-Trajkovska, O., Miteva-Kacarski, E. (2017). Cryptocurrencies: Advantages and Disadvantages. http://eprints.ugd.edu.mk/18707/1/Cryptocurrencies.pdf Retrieved on May 29th, 2018.

Cahn, E. (2000). No More Throwaway People: The Co-Production Imperative. Essential Books, Washington.

Cahn, E., Gray, C. (2015). The Time Bank Solution. *Stanford Social Innovation Review*. Summer 2015, Vol 13 (3), 40-45.

Caldwell, C. (2000) Why do people join local exchange trading systems. *International Journal of Community Currency Research*. Vol 4, 1-15.

Community Currency Knowledge Gateway. LETS. http://community-currency.info/fr/glossaire/lets/ retrieved on May 1st, 2018.

Community Exchange Systems Ltd. (2018). https://www.community-exchange.org/home/ Consulted on May 30, 2018.

Das, D.K. (2003). An international Finance Reader. Psychology Press.

DeMeulenaere, S. (2008) 2007 Annual report of worldwide database of complementary currency systems. *International Journal of Community Currency Research*. Vol 12, 2-19.

Deutsche Bundesbank. ECU (European Currency Unit). https://www.bundesbank.de/Redaktion/EN/Glossareintraege/E/ecu.html retrieved on May, 4th 2018.

Dittmer, K. (2013). Local currencies for purposive degrowth? A quality check of some proposals for changing money-as- usual. *Journal of Cleaner Production*. 54, 3-13.

European Central Bank. https://www.ecb.europa.eu/mopo/intro/html/index.en.html Consulted on May 29, 2018.

Fare, M. (2013). Monnaies sociales et complémentaire et développement durable. http://encyclopedie-dd.org/encyclopedie/neige-neige-economie-neige-neige/monnaies-sociales-et retrieved on April 30, 2018.

Farley, J., Burke, M., Flomenhoft, G., Kelly, B., Forrest, M., Posner, S., Putnam, M., Scanlan, A. and Witham, A. (2013). Monetary and Fiscal policies for a finite planet. *Sustainability*. 5, 2802-2826.

Federal Reserve History. (2013). Nixon Ends Convertibility of US Dollars to Gold and Announces Wage/Price Controls.
https://www.federalreservehistory.org/essays/gold_convertibility_ends Retrieved on March, 16th 2018.

Fesenfeld, L., Stuckatz. J., Summerson, I., Kiesgen, T., Russ, D. and Klimaschewski, M. (2015). It's the motivation, stupid! The influence of motivation of secondary currency initiators on the currencies' success. *International Journal of Community Currency Research*. Vol 19 (D), 165-172.

Gerdesmeier, D. (2009). Pourquoi la stabilité des prix est-elle importante pour vous?. Banque Centrale Européenne. Retrieved on May 30, 2018.

Gelleri, C., (2009) Chiemgauer regiomoney: theory and practice of a local currency. *International Journal of Community Currency Research*, Vol 13, 61-75.

Global Impact Investing Network. (2016). The business value of impact measurement. New York, USA.

Godshalk, H. (2012). Does demurrage matter for Community Currencies?. *International Journal of Community Currencies Research*. 16(D), 58-69.

Going the Extra Mile Payment Services NPC. http://gemproject.org/en/#home consulted on May, 19th 2018.

Greco, T. (2018) Local Currencies: what works and what doesn't https://beyondmoney.files.wordpress.com/2018/02/local-currenciese28094what-works.pdf retreived on April 9th, 2018.

Greco, T. (2001). Money, Understanding and creating alternatives to legal tender. Chelsea Green Publishing Company. Vermont, USA.

Groppa, O. (2013). Complementary Currency and its impact on the economy. *International Journal of Community Currency Research*. Vol 17, section A, 45-57.

Hallsmith, G., Lietaer, B. (2011). Creating Wealth Growing local economies with local currencies. New Society Publishers. Canada.

Hallsmith, G., Lietaer, B. (2006). Community Currency Guide. https://www.community-exchange.org/docs/Community_Currency_Guide.pdf retrieved on November 24, 2017.

Hopkins, R. (2016). What is resilience?. http://www.resilience.org/about-resilience/ retrieved on May, 4th 2018.

Ilgman, C. (2015). Silvio Gesell:" A strange, unduly neglected" monetary theorist. *Journal of Post Keynesian Economics*. 38, 532-564.

International Monetary Fund (IMF). (2000). Monetary and Financial Statistics Manual. Washington, USA.

INA. (2008). Les accords de Bretton Woods. http://www.ina.fr/video/I11052345 retrieved on March, 16th 2018.

Kennedy, M. (2006). Pourquoi nous avons besoin d'innovations monétaires? 3 erreurs courantes, 3 conséquences probables, 3 solutions possibles. In Blanc, J. *Exclusion et liens financiers : Monnaies sociales*. rapport 2005-2006, Paris: Economica, 547p.

La Gonette - MLC. http://www.lagonette.org/ consulted on May, 19th 2018.

Le Cairn, Monnaie Locale et Citoyenne. https://www.cairn-monnaie.com/ consulted on May, 19th 2018.

Lietaer, B. (2001). The future of money: creating new wealth, work and a wiser world. Century. London.

Mankiw, G.N., Taylor, M.P. (2011). Principes de l'économie. (E.Tosi, Trad), 2e édition européenne. Bruxelles: Editions de Boeck. Collections: Ouvertures économiques.

Marshall, A and O'Neill, D. (2018) The Bristol Pound: a tool for localisation?. E*cological Economics*. 146, 273-281.

McLeay, M., Radia, A., Thomas, R. (2014). Money in the modern economy: an introduction. *Monetary analysis directorate*. Q1; 4-13.

McLeay, M., Radia, A., Thomas, R. (2014). Money creation in the modern economy. *Monetary analysis directorate*. Q1; 14-27.

Michel, A. and Hudon, M. (2015). Community Currencies and sustainable development: A systematic review. *Ecological Economics*. 116, 160-171.

Moody's Analytics. (2013). Basel III Capital and Liquidity standards: FAQ's. https://www.moodysanalytics.com/-/media/article/2013/2013-18-10-basel-iii-capital-and-liquidity-standards-faq.pdf retrieved on May 30, 2018.

Nakamoto, S. (2009). Bitcoin: A Peer-to-Peer Electronic Cash System. https://bitcoin.org/bitcoin.pdf Retrieved on May 29, 2018.

Nakazato, H. and Hiramoto, T. (2012). An empirical study of the social effects of community currencies. *International Journal of Community Currency Research*. Vol 16 (D), 124-135.

New Economics Foundation. (2015). People Powered Money. London.

New Economics Foundation. (2014). No Small change. Evaluating the success of your community currency project. London.

Pacione, M. (2011). Local money-A response to the globalisation of capital?. *Quaestiones Geographicae*. 30(4), 9-19.

Peacock, M.S. (2014). Complementary Currencies: History, theory, prospects. *Local Economy*. Vol 29 (6-7), 708-722.

Pearson, R. (2003). Argentina's Barter Network: New currency for new times?. *Bulletin of Latin American Research*. Vol 22 (2), 214-230.

Place, C. and Bindewald, L. (2015). Validating and improving the impact of complementary currency systems through impact assessment frameworks. *International Journal of Community Currency Research*. Vol 19 (D), 152-164.

Place, C. (2018). Impact Assessment of monetary innovation: sustainability with existing frameworks and integral approach. *International Journal of Community Currency Research*. Vol 22 (Winter), 74-88.

Ruddick, W., Richards, M. and Bendell, J. (2015). Complementary Currencies for sustainable development in Kenya The case of the Bangla-Pesa. *International Journal of Community Currency Research*. Vol 19 (D), 18-30.

Schraven, J. (2000) The economics of local exchange and trading systems : a theoretical approach. *International Journal of Community Currency Research*. Vol 4, 5.

Seyfang, G., Longhurst N. (2013). Growing green money? Mapping community currencies for sustainable development. *Ecological Economics*. 86, 65-77.

Seyfang, G., Longhurst N. (2016). What influences the diffusion of grassroots innovations for sustainability? Investigating community currency niches. *Technology Analysis & Strategic Management*. 28:1, 1-23.

Social Trade Organisations. (2018). https://www.cyclos.org/about-stro Consulted May 30, 2018.

Soder, N. (2008). Community Currency: an approach to economic sustainability in our local bioregion. *International Journal of Community Currency Research*. Vol 12, 24-52.

SVTG (Social Venture Technology Group). (2008). Catalogue of approaches to impact measurement: Assessing social impact in private ventures. Social Venture Technology Group. 2008.

Stankovic, M. (2013). The advantages of being a member of the european monetary union and its influence on trade in the eurozone. http://www.vps.ns.ac.rs/SB/2013/2.3.pdf Retrieved on May 30, 2018.

Wang, S. (2016). Examining the Effects of Dollarization on Ecuador. Council on Hemispheric Affairs. http://www.coha.org/wp-content/uploads/2016/07/Sam-Wang-Ecuador-Dollar_Final.pdf Retrieved on May 30, 2018.

Table of Appendix

Place Impact Assessment Framework

n°	Integral Approach	Dimension	Level	Vision Goal	Guideline Principle	Evaluation Objective	T/C	LM	Progress Measurement Indicators	Monitoring and Evaluation Methodology	C
1	Subjective Existential reflection	Culture	Macro	Inner Outer Sense of Harmony	Altruism	Other-Oriented Cooperation & Self-Oriented Competition Equilibrium	A	C	% other-oriented vs self-oriented	System database	2
2		Social	Meso	Needs Satisfaction	Well-being	Increase self-confidence	B M I	C	% agree & strongly agree	Interview	1
3						Friendship and Trust	B M I	C	% agree & strongly agree	Interview	2
4						Improve quality of life	B M I	C	% agree & strongly agree	Interview	1
5						Mindfulness and Spirituality	A	P	% agree & strongly agree	Interview	2
6	Objective Neurobehavioral science	Economic	Micro	Financial Autonomy Development	Risk	Disaster mitigation	U C I	P	Backup System frequency	System database	1
7						Currency Security Features	A	P	N° security features	Best Practices: 3	3
8						Transaction and Data safety	A	A	N° failure accident	System database	2
9						Record keeping and statistics	A	A	backup System frequency	System database	1
10		Environment	Meta	Transition and autonomy	Relocation	GHG emission	C I	C	%CO2 & CH4 decrease	Regional Database	3
11			Meso	Ecological Footprint reduction	Biodiversity	Reforestation	C I	C	N° tree plantation	Regional Database	3
12					Eco-Friendly	Behaviour change	C I	C	% agree & strongly agree	interview	3
13						Waste management	C I	C	% recycle increase	regional Database	3
14						Water Management	C I	C	% water consumption decrease	regional Database	2
15			Micro	Responsible consumption Motivation		Green Economy	C I	C	% organic & fair product increase	regional Database	2
16	Inter-subjective Critical reflection	Culture	Meta	Societal Ecceptance	Societal	Recognition credibility legtimacy from (Inter-) governmental institution	A	C	N° Institutional support	Management Database	3
17						Transverse cross-disciplinary integral holistic collective intelligence	A	C	N° Scholar expert specialist involved	Management Database	2
18			Meso	Pluralism Inclusivity Diversity	Creativity	Alternative Flexible Libertarian Measure of Value	A	C	Yes/No	Best Practices	1
19						Softskills and hard skills design thinking	A	C	% Soft skills vs hard skills	Management Database	3
20		Economic	Macro	Make Exchange Possible	Resilience	Training	A	P	% trained	interview	3
21							A	P	N° training hours per year	management Database	2
22			Meso	Inclusice Community-Building	Viability	Participation	A	C	N° active members per year	management Database	1
23						Friendly User	U C I	C	% agree & strongly agree	interview	2
24						Intelligibility	A	P	% agree & strongly agree	interview	1
25						Team Capacity	A	A	N° Management team	management Database	3
26		Social	Meta	Link share reciprocity Solidarity	Cooperation	Exchangeability	A	C	N° compensation systems	system database	2
27						Co-creation	A	P	N° involved in design	management Database	3
28						New skills	A	A	% agree & strongly agree	interview	3

29			Macro	Equity and justice	Engagement	Involvement	A	C	% agree & strongly agree	interview	1
30						Inclusion	B M I	C	N° Solidarity Inclusion	management Database	1
31						Social service dependent	B M I	C	N° social service dependant	system database	2
32						Cohesion	B M I	C	N° new relationship	management Database	2
33			Meso	Needs satisfaction	Diversity	Educational level repartition	A	A	% High & Graduate school	interview	3
34			Micro	Cohesion cooperation Sharing vector	Mission	Ethic Charter	A	A	Yes/No	best Practices	1
35						Conducts Code	A	A	Yes/No	best Practices	2
36					Education	Enrolment	A	C	N° Children enrolled in shool	interview	3
37	Inter-Objective Complexity Economics	Culture	Micro	Innovation Confidence Humility	Innovation	Open Questioning Capacity	A	C	N° yearly improvement	management Database	2
38		Governance	Meta	Participatory Democracy	Democracy	Collaborative Election Decision Process:	A	P	N° Stakeholder involved	interview	2
39						Consent Sociocracy Holacracy	A	A	N° administrative person	management Database	1
40			Macro	Citizenship Engagement Recognition		Effective Stakeholder Involvement Stimulation	A	P	% participation among users	management Database	1
41			Meso	Independent Control	Legal	Independent Quality Control Process	A	P	Certification	External Auditing	2
42			Micro	Monetary Creation as a common good		National Legislation	A	P	N° legal text	system database	2
43					Transparency	taxation	A	C	% rate (fixed & variable)	External Auditing	1
44						Open Source system	A	C	Certification	External Auditing	1
45						Open Banking	A	C	certification	External Auditing	2
46						Free Code and legality	A	C	% free code	External Auditing	3
47		Economic	Meta	Crisis Resiliency	Resilience	Market Diversity	A	C	N° goods & Services category	Classification Standards	3
48							A	P	N° & % users & producers	System database	3
49			Macro	Make exchange Possible		Tipping Point Network Scale	U C I	C	N° users & Business	Minimum best practices: 500 & 100	2
50						Interoperability	C I	A	N° systems users	System database	3
51			Micro	Financial Autonomy Development	Finance	Investment standards	U C I	P	Certification	external Auditing	2
52						Loan Standards	U C I	P	Certification	external Auditing	3
53					Accountancy	Accountancy Standards	U C I	P	Certification	external Auditing	1
54						Appropriate Socio-Environmental Accountacy Scheme	U C I	P	Certification	external Auditing	2
55					Management	Monitoring and evaluation	A	P	N° standards & Tools used	best Practices	3
56					Exchange	Demurrage/interest	A	C	% rate	best Practices	3
57						Debt levels	A	C	Minimum and Maximum	best Practices	2
58						Discount rate	A	P	% discount	best Practices	2
59						Salary Bonus	U C I	P	% Bonus	best Practices	1
60						Exchange rates	A	A	% Rate	best Practices	2
61						Backed System	A	A	% backing	best Practices	2
62		Social	Micro	Cohesion	Poverty	Income Increase	B M I	C	% income Increase	interview	2

63				Cooperation Sharing Vector			A	C	N° risen out of acute poverty	interview	1
64						Employment	B M I	C	% employment increase	interview	2
65							A	C	N° new job created	interview	3
66		Environment	Meta	Transition and autonomy	Relocation	local growth	U C I	C	% GDP local increase per year	regional Database	2
67							U C I	C	N° Profitable enterprise support	interview	1
68							U C I	C	N° new Profit & wage generated	interview	2
69			Macro	Eco-Localization relocation		local Consumption	U C I	C	% products locally produced	system database	2
70						Currency exchange	A	P	% salary exchanged in SCC	interview	1
71							A	P	N° SCC spent & earned	system database	2

F	Link	Score	Justification	Recommendation	n°
M	A				1
Y	B				2
Y	B				3
D	2				4
D	1				5
Y	D				6
W	D				7
W	D				8
W	D				9
M	12B				10
Y	12B				11
W	13AB				12
D	12B				13
W	12B				14
D	12B				15
M	C				16
M	C				17
D	C				18
Y	D				19
M	1D				20
M	1D				21
Y	3D				22
Y	3D				23
D	3D				24
Y	3D				25
M	3				26
M	3				27
Y	3				28

D	13				29
W	13				30
Y	13				31
D	13				32
W	3				33
D	3				34
W	3				35
D	23				36
Y	23D				37
Y	123D				38
Y	123D				39
Y	123D				40
Y	12D				41
W	12D				42
W	13D				43
M	13D				44
M	13D				45
W	13D				46
M	1				47
D	1C				48
Y	1C				49
M	1C				50
D	2D				51
D	2D				52
D	12D				53
M	12D				54
M	2D				55
W	23D				56
D	23D				57
W	23D				58
D	23D				59
M	23D				60
D	23D				61
W	123C				62

W	123BC				63
D	123BC				64
D	123BC				65
M	13AB				66
Y	13AB				67
Y	13AB				68
M	13AB				69
M	13CB				70
Y	13CB				71

Templates

Business Survey Florain

Quel est le nom de votre structure?

[...]

Votre structure est:

- Une association
- Une entreprise
- Une profession libérale ou auto-entreprise

Quelle est votre activité professionnelle?

[...]

Dans quelle ville ou zone géographique exercez vous ?

[...]

Combien y a-t-il de salarié-e-s au sein de la structure?

[...]

Depuis quand votre structure est-elle membre du réseau du Florain?

[...]

Depuis votre entrée dans le réseau, combien pensez vous avoir eu de clients particuliers différents qui vous ont payé en Florains?

[Aucun; moins de 5; Entre 5 et 10; Entre 10 et 20; Entre 20 et 50]

Depuis votre entrée dans le réseau, combien estimez-vous avoir reçu de Florains par des clients particuliers?

[...]

Pensez-vous que le Florain vous a amené de nouveaux clients particuliers?

[Oui; Non; Je ne sais pas]

Depuis votre entrée dans le réseau, combien pensez vous avoir eu de clients professionnels différents qui vous ont payé en Florains?

[Aucun; 1, 2, 3, 4, 5...]

Depuis votre entrée dans le réseau, combien estimez vous avoir reçu de Florains par des clients professionnels?

[...]

Pensez-vous que le Florain vous a amené de nouveaux clients professionnels?

[Oui; Non; Je ne sais pas]

Si oui, pouvez-vous nous citer lesquels?

[...]

Quelle proportion de votre chiffre d'affaire estimez-vous avoir fait en Florains depuis votre entrée dans le réseau

[0%; Entre 1 et 5%; Entre 5 et 10%]

Avez-vous dépensé des Florains gagnés grâce à votre activité professionnelle auprès de fournisseurs ou de prestataires professionnels?

[Oui; Non]

Si oui, pouvez-vous nous les citer?

[...]

Si oui, pouvez-vous estimer la proportion de Florains reçus ainsi re-dépensés?

[Moins de 10%; Entre 20 et 50%; Entre 50 et 99%; 100%]

Avez-vous utilisé des Florains reçus pour payer une partie de vos salaires ou de ceux de vos employé-e-s?

[Oui;Non]

Si oui, pouvez-vous estimer la proportion de Florains reçus ainsi re-dépensés

[Moins de 10%; entre 20 et 50%; Entre 50 et 90%; Plus de 90%]

Avez-vous stocké des Florains en attendant de pouvoir les re-dépenser?

[Oui; Non]

Si oui, pouvez-vous nous indiquer un montant approximatif de Florains stockés?

[...]

Etes vous à la recherche de nouveaux débouchés pour vos Florains?

[Oui; Non]

Si oui, pouvez-vous nous citer les types de fournisseurs ou prestataires que vous recherchez?

[...]

Souhaitez-vous que nous vous contactions pour échanger avec vous sur les fournisseurs/prestataires/clients pro avec qui vous seriez susceptibles de travailler en Florains?

[Oui;Non]

Quelles étaient vos motivations pour intégrer le réseau Florain? Plusieurs réponses possibles

- Encourager une finance solidaire et éthique
- Participer à un projet qui correspond à mes valeurs (sociales, écologiques...)
- Soutenir le développement économique de mon territoire
- Développer mon activité professionnelle en attirant de nouveaux clients particuliers
- Intégrer un réseau d'acteurs économiques, et pourquoi pas faire des affaires!

Si vous aviez d'autres motivations, vous pouvez nous l'indiquer ici!

[...]

Rencontrez-vous des difficultés techniques dans l'utilisation des Florains? Si oui merci de nous l'indiquer ci-dessous.

[...]

Nous prévoyons d'organiser régulièrement des rencontres entre professionnels du Florain, êtes vous intéressé pour y participer?

[Oui; Non]

Si oui, que souhaiteriez-vous y trouver? Plusieurs réponses possibles

- des temps de formation sur des sujets liés au Florain
- des temps d'échange formels entre professionnels
- des temps conviviaux et informels

Y'a t'il des sujets spécifiques que vous souhaitez voir abordés pendant ces réunions?

[...]

Quel rythme vous parait le meilleur pour ces réunions?

[2 fois par an; 4 fois par an; Tous les 2 mois]

De façon générale, êtes-vous satisfait-e du fonctionnement du Florain?

[Oui; Non]

Si vous avez des commentaires ou des remarques à nous faire, n'hésitez pas!

[...]

Business Survey Cairn/Gonette

De quelle catégorie votre activité se rapproche-t-elle le plus?
- Alimentaire
- Restaurant, Bar
- Hygiène et cosmétique
- santé et bien-être
- Art et Artisanat
- Informatique et communication
- Sortie culturelle
- Sport et Loisir
- Formation et éducation
- Bâtiment, Bricolage, papeterie
- Services à la personne
- Transport
- Autre

Êtes-vous un producteur?
- Oui
- Non

Quelle proportion de vos produits mis en vente est soit locale, soit éthique ou biologique?
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

A quelle fréquence utilisez-vous des Gonettes ? (Achat professionel)
- Tous les jours
- Toutes les semaines
- Tous les mois
- Tous les 6 mois
- Je ne l'ai jamais utilisé

A quelle fréquence recevez-vous des Gonettes ?
- Tous les jours
- Toutes les semaines
- Tous les mois
- Tous les 6 mois
- Je ne l'ai jamais utilisé

Comment décririez-vous la compréhension de la Gonette?
- Très compliqué
- Compliqué
- Indifférent
- Facile

- Très facile

Comment décririez-vous l'utilisation de la Gonette?

- Très contraignant
- Contraignant
- Indifférent
- Extensif
- Très extensif

Comment décririez-vous les moyens de paiement de la Gonette?

- Très compliqué
- Compliqué
- Indifférent
- Facile à utiliser
- Très facile à utiliser

Combien d'Euros convertissez-vous en Gonettes en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Combien recevez-vous en Gonettes en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Combien dépensez-vous en Gonettes en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Combien de Gonettes convertissez-vous en Euros en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100

- 100 à 500
- Plus de 500

Au sein de votre organisation, combien de personnes perçoivent des Gonettes en salaire ou bonus?

- Aucune
- En réflexion
- 1
- 2
- Plus de 2

L'utilisation de la Gonette a-t-il permis d'augmenter votre chiffre d'affaire?

- Oui
- Non
- Je ne sais pas

Si oui, estimez l'augmentation:
[...]
Avez-vous changé de fournisseur suite à la Gonette?

- Oui
- Non
- Bientôt

Dans quelle mesure êtes-vous d'accord ou non avec les affirmations suivantes?

- Nous avons changé notre manière de recycler.
- Nous avons diminué notre consommation d'eau.
- Nous avons augmenté le nombre de produits locaux, équitable ou Biologique vendu.

[Pas du tout d'accord - En désaccord - Indifférent - D'accord - Tout à fait d'accord]

Avez-vous déjà participé à une réunion ou assemblée générale ?

- Oui
- Non
- Je compte participer à la prochaine

Êtes-vous un·e membre actif/ve de l'organisation ?

- Oui, je le suis
- Oui, je l'ai été mais plus maintenant
- Non, mais j'aimerais le devenir
- Non, Je ne le suis pas

User Survey Florain

De quel sexe êtes-vous ?

- Femme
- Homme

Quelle est votre tranche d'âge ?

- Moins de 18 ans
- 18/25ans
- 26/35ans
- 36/45ans
- 46/55ans
- 56/65ans

- Plus de 65ans

Quel est votre niveau d'études ?

- Secondaire inférieur
- Secondaire supérieur
- Bachelier et équivalent
- Master et équivalent
- Docteur et équivalent
- Autres

Êtes-vous originaire de la région du Florain ?

- Oui
- Non

Quelle est votre occupation ?

- Travailleur/euse
- Chômeur/euse
- Retraité/e
- Etudiant/e
- Père/mère au foyer
- autre

Quand avez-vous adhéré pour la première fois ?

- Aujourd'hui
- La semaine dernière
- Le mois dernier
- Ces 6 derniers mois
- il y a plus d'un an

A quelle fréquence utilisez-vous le Florain ?

- Tous les jours
- Toutes les semaines
- Tous les mois
- Tous les 6 mois
- Je ne l'ai jamais utilisé

Comment décririez-vous la compréhension du Florain?

- Très compliqué
- Compliqué
- Indifférent
- Facile
- Très facile

Comment décririez-vous l'utilisation du Florain?

- Très contraignant
- Contraignant
- Indifférent
- Extensif
- Très extensif

Comment décririez-vous les moyens de paiement du Florain?

- Très compliqué
- Compliqué
- Indifférent
- Facile à Utiliser

- Très facile à utiliser

Combien d'Euros convertissez-vous en Florains en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Combien gagnez-vous en Florains en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Combien dépensez-vous en Florains en moyenne par mois ?

- Rien
- Moins de 5
- 5 à 10
- 10 à 20
- 20 à 50
- 50 à 100
- 100 à 500
- Plus de 500

Voudriez-vous percevoir votre salaire ou bonus en partie en Florains ?

- Oui, c'est déjà le cas
- Oui
- Pourquoi pas, je dois y réfléchir
- Non

Quel est le top 5 des catégories pour lesquelles vous payez en Florains? (Comment est-ce que j'utilise les Florains?)

- Courses, Alimentaire
- Restaurants, Bars
- Hygiènes et cosmétiques
- Santé et bien-être
- Art et Artisanat
- Informatique et communication
- Sorties Culturelles
- Sports et Loisirs
- Formations et éducation
- Bricolage, papeterie
- Services à la personne
- Transports

- Divers

[1ère;2ème;3ème;4ème;5ème;Pas dans le top 5]

Pour chaque catégorie, quelle partie est couverte par le Florains? (Comment les Florains couvrent mon Budget?)

- Courses, Alimentaire
- Restaurants, Bars
- Hygiènes et cosmétiques
- Santé et bien-être
- Art et Artisanat
- Informatique et communication
- Sorties Culturelles
- Sports et Loisirs
- Formations et éducation
- Bricolage, papeterie
- Services à la personne
- Transports
- Divers

[Je ne sais pas; Rien; Un petit peu; La moitié; La plupart; Tout]

Quel effet l'utilisation du Florains a-t-il sur:

- Votre confiance en vous ?
- La qualité de vos relations ?
- Le nombre de relations ?
- Votre épanouissement personnel ?
- L'entretien de vos compétences ?
- La création de nouvelles compétences ?
- Votre pouvoir d'achat et votre revenu ?
- Votre indépendance financière ?
- l'égalité et la justice sociale
- Votre conscience écologique ?
- Votre engagement écologique ?
- Votre manière de consommer ?
- Votre manière de recycler?
- Votre consommation de produits éthiques ?
- Votre consommation de produits biologiques ?
- Votre consommation de produits locaux ?

[Très négatif; Négatif; Légèrement négatif; Indifférent; Légèrement positif; Positif; Très positif]

Avez-vous déjà participé à une assemblée générale ?

- Oui
- Non
- Je compte participer à la prochaine

Êtes-vous un·e membre actif/ve de l'organisation ?

- Oui, je le suis
- Oui, je l'ai été mais plus maintenant
- Non, mais j'aimerais le devenir
- Non, je ne le suis pas

Quel est votre taux de participation aux activités (réunions…)?

- Jamais

- Rarement
- Parfois
- Souvent
- Presque tout le temps
- Toujours

Avez-vous suivi une formation sur les Monnaies Locales Complémentaires ?

- Oui
- Non

Si oui, combien d'heures de formation avez-vous suivies ?

Initiative Manager Questionnaire

Complementary Currency Model

What are the mission and objectives of the CC?

What is your CC model? How does it work?

How old is your CC? Can you describe a brief history of the implementation?

If there is a paper currency, how many security features does it have?

Do you keep a record of transactions or exchanges? How?

if you have an electronic currency,
What kind of back-up systems do you have? How frequent?

Have you ever encounter failure or accident? How many?

Project Designing

Which institutions (Local, Governmental, NGO, European…) support your CC and how?

How many people have been involved in the creation and development of your CC? How many were scholars, CC specialists?

How many hours of training do you give per year?

What is your definition of “Active member”?

How many “active members” do you count in the project?

How many active managing members do you count in the project? (In committees, etc…)

How many persons have been involved in the creation and development of the CC?

Governance

Do you have an Ethic Chart?

Do you have a code of conduct, internal rules of procedure?

Do you employ people to run the project? How many equivalent full time?

Which stakeholders take part in the governance?

What is the managing structure behind your CC?

Management

Are you certified?

Which specific laws you have to follow?

What is the taxation rate you have to pay?

Do you use an open source management system?

How do you evaluate your project? Do you use indicators?

What are the improvements that you implement last year?

How do you manage data and data protection?

Use of CC

What are the means to exchange or receive CC?

Do you use a system like demurrage or negative interest?

Do you grant credit to your partners? What would be the limits (maximum and minimum)?

Do you (or participating businesses) offer discount when buying with the CC?

Do you offer bonuses in CC?

When converting back into euros, do you ask for an exchange rate? What would it be?

Is the CC backed by any mean? How much is backed?

How many CC have been spent this year?

How many CC have been earned this year?

How many CC have been reconverted this year?

How many Euros have been converted this year?

What is the percentage of costs that are covered with subsidies, donation etc.?

Participation

How many members have been present during your last General Assembly?

Inside the network, how many businesses have changed their supply chain, their supplier? Have created new working partnerships?

What is the proportion of producers related to business partners?

How many users and how many businesses do you currently have?

Compared to all the products that are sold at your partners, what is the percentage of products produced in the region? In the country?

External Activities

How do you carry out your ecological commitment?

How do you carry out your social commitment?

Data : Florain

Data Summary Business Survey - Florain

Private customer: How many client have paid in Florain?	# Participants	# more than 10	% more than 10
	22	8	36%
Private customer: How many florains did you get?	# Participants	# more than 200	% more than 100
	22	7	32%
Private customer: Did you have new customer thanks to the florain?	# Participants	# yes	% yes
	22	4	18%
Business customer: How many client have paid in Florain?	# Participants	# more than 1	% more than 1
	22	11	50%
Business customer: How many florains did you get?	# Participants	# more than 200	% more than 200

	22	9	41%
Business customer: Did you have new customer thanks to the florain?	# Participants	# yes	% yes
	22	3	14%
What proportion your turnover did you make in Florains?	# Participants	# more than 1%	% more than 1%
	22	13	59%
Did you use florain for business purchases?	# Participants	# Yes	% Yes
	22	8	36%
Did you use florain for salaries?	# Participants	# Yes	% Yes
	22	10	45%
Are you looking for new ways to use the florain?	# Participants	# yes	% Yes
	22	13	59%

Data Summary User Survey - Florain

Objective	data		
Friendly User	# participation	# Yes	% Yes
	70	50	71%
Intelligibility	# participation	# Yes	% Yes
	70	55	79%
# Conversion in CC	# participation	# More than 50	% More than 50
	70	18	26%

	# participation	# Less than 10	% Less than 10
	70	20	29%
# Earn in CC	# participation	# More than 50	% More than 50
	70	8	11%
	# participation	# Less than 10	% Less than 10
	70	57	81%
# Spent in CC	# participation	# More than 50	% More than 50
	70	19	27%
	# participation	# Less than 10	% Less than 10
	70	17	24%
Earn in CC (Want)	# participation	# Yes & Already	% Yes & Already
	70	32	46%
effect on Self confidence	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	26	37%
Effect on Quality of relations	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	43	61%
Effect on # of friendships	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	33	47%
Effect on mindfulness	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive

	70	46	66%
Justice and equality	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	41	59%
Effect on Ecological conscious	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	43	61%
Effect on Ecological Engagement	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	41	59%
Effect on spending behaviour	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	40	57%
Recycling behaviour	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	27	39%
Effect on buying more fair	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	32	46%
Effect on buying more organic	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	27	39%
Effect on buying more local	# participation	# Positive or Slightly Positive	% Positive or Slightly Positive
	70	32	46%
Meeting participation	# participation	# Yes	% Yes
	70	27	39%

Active member	# participation	# Yes or was	% Yes or was
	70	13	19%
Training	# participation	# Yes	% Yes
	70	5	7%
Academic Background	# participation	# at least bachelor	% at least bachelor
	70	61	87%

Data: Cairn

Transcript - Cairn - Interview 1

Q: Comment avez-vous connu la MLC?
Cairn_A1: Et bien donc je me suis engagé lors de la création avant le lancement. Alors j'avais participé à quelques forum ouvert via des amis d'une autre asso. Et puis après ça j'allais de plus en plus souvent. Donc en bref, j'ai rencontré des personnes qui m'en ont parlé quand je suis arrivé et j'ai beaucoup aimé le projet et je me suis impliqué dans sa conception tout simplement. Pour les monnaies complémentaires en général, j'étais disons déjà un peu familier avec le sujet mais pas trop trop non plus quoi. J'ai vu quelques reportages sur les monnaies locales en france et puis bah le film documentaire "Demain".

Q: Comment décririez-vous le fonctionnement de la MLC?
Cairn_A1: Donc le cairn est une association qui est en fait un réseau d'utilisateurs et de magasins. Au sein du réseau, chacun peut payer avec une monnaie locale, interne au réseau dans les magasins qui répondent à une charte bien précise qui partage nos valeurs. Donc on utilise des billets pour payer nos produits en cairn au lieu d'euro pour favoriser une implantation locale.

Q: Que pensez vous de son fonctionnement?
Cairn_A1: C'est assez facile de comprendre à quoi le cairn sert. C'est tout simplement une monnaie papier. Tout comme un euro j'ai un cairn. et je peux le dépenser dans les magasins qui les acceptent. Comme les magasins sont tous recensés, on peut facilement trouver des nouveaux lieux pour acheter ce dont on a besoin.

Q: Comment utilisez-vous la MLC? Fréquence? Montant? type de dépense?
Cairn_A1: Alors je pense que je pense que je convertis près de 200euro par mois en moyenne donc déjà pas mal. Du coup ça dépend s'il me reste encore quelque chose. Je fais pas vraiment attention. Mais bon c'est assez facile d'aller dans un bureau de change donc difficile de donner une somme précise. Et je dépense tout vu qu'on ne peut pas reconvertir en euro et je ne vois pas trop l'intérêt personnellement. Pour les types de dépenses, je dirais que tout va dans

l'alimentaire et les bars. Donc vraiment une grosse partie en nourriture au jour le jour. Et puis sinon un peu dans les sorties par exemple pour boire un verre dans un bar du coin ou pour aller dans un restaurant.

Q: Avez-vous changé de lieu de consommation?
Cairn_A1: Alors du coup, j'allais déjà dans les magasins qui acceptent le cairn. Je suis on peut dire je suis un convaincu. J'ai découvert de nouveaux endroits pour acheter des produits par exemple cosmétiques naturels etc.. qu'on a découvert en cherchant les professionnels mais sinon j'allais déjà dans quelques magasins locaux et bio.

Q: L'utilisation de la monnaie a-t-elle influencé votre pouvoir d'achat?
Cairn_A1: Non pas du tout. Il y a pas vraiment de changement observable et les quantités dépensées sont pas énormes.

Q: L'utilisation de la MLC a-t-elle une influence sur votre épanouissement personnel, votre confiance en vous?
Cairn_A1: Du coup oui tout à fait. Enfin pas vraiment ma confiance mais le fait de pouvoir voir le projet grandir et partager et rencontrer des gens du cairn avec qui avec les mêmes valeurs. Donc c'est épanouissant de pouvoir vivre et développer des amitiés qu'on aurait pas pu avoir autrement. Donc il y a quand un effet au niveau des relations. De pouvoir partager et puis c'est valorisant aussi surtout quand tu échange avec des personnes qui ne connaissent pas encore.

Q: Est-ce que l'utilisation de la MLC a influencé votre manière de consommer?
Cairn_A1: Alors je consomme probablement un peu plus de produit locaux en général. Enfin comme j'ai dit que j'étais déjà client mais j'ai élargi un peu les lieux d'achats enfin surtout un magasin en particulier et donc aussi j'achète plus de produit locaux. Donc oui dans une certaine limite

Q: Est-ce que l'utilisation de la MLC a influencé votre engagement écologique? Politique?
Cairn_A1: C'est une sorte d'acte politique et d'engagement que de mettre dans le réseau plus de cairn. Bah On montre qu'on désire une consommation plus locales, plus éthique et soutenir notre économie. que chacun soit payé justement et pas oppressé donc voila. On veut changer un peu les choses et la vision des gens en proposant une alternative.

Transcript - Cairn - Interview 2

Q: Comment avez-vous connu la MLC?
Cairn_A2: Alors comment j'ai connu le Cairn. C'est une bonne question. Comment j'en ai entendu parler je ne sais plus trop qui sait. Ca doit être via, peut-être le facebook de la mairie de grenoble ou des choses comme cela au départ. Après donc ça c'était juste pour savoir ce que c'était, comment ça c'est lancé. Et après il se trouve que je donne des cours de poterie. Et il se trouve que j'ai une élève qui est très impliqué dans le Cairn et par ami de longue date aussi. Donc après c'est plus par connaissance que j'ai adhéré en tant que professionnels.

Q: Comment décririez-vous le fonctionnement de la MLC?

Cairn_A2: alors pour moi qu'une monnaie locale Alternative qui va permettre de favoriser les circuits court locaux.

Q: Que pensez vous de son fonctionnement?
Cairn_A2: Alors c'est assez simple alors après c'est vrai que moi je me suis mise en tant que professionnel donc ça c'est un petit peu différent parce que la souscription est un peu cher je trouve. Mais sinon en tant que particulier ben oui c'est facile. Le fait que ce soit lui 1 pour 1 avec l'euro, le fait que ouais je trouve le site internet les bien faits. Il est clair il ya des informations qui sont envoyées mais elles font pas trop nombreuses non plus. Donc ouais non je trouve que le fonctionnement est bien. Après je dois dire que je ne sais pas du tout où vont les euros ou comment ils sont utilisés.

Q: Comment utilisez-vous la MLC? Fréquence? Montant? type de dépense?
Cairn_A2: Pour l'instant, je n'ai reçu que 38 euros vraiment dans mon entreprise. Donc je les ai utilisés donc du coup je les ai je suis fait un versement de peine parce qu'au niveau comptable bah c'est pas facile. Ah bah oui parce que du coup moi j'ai eu dans mon domaine aucun fournisseur local, aucun fournisseur on va dire de petite taille. Quand on achète de la terre pour la poterie, c'est par tonne. Donc ça vient de l'autre au bout de la france, voire d'allemagne donc voila. Donc du coup je ne peux pas les réinvestir pour mon entreprise du coup je me les transfère par paye. donc voilà il a du coup après je les ai utilisé pour acheter des produits locaux sous forme de nourriture. Et je ne converti pas encore de l'argent. Pour l'instant je ne l'ai pas fait. Faudrait que je le fasse mais j'ai pas encore pris le temps.

Q: Avez-vous changé de lieu de consommation?
Cairn_A2: Non du tout que j'étais déjà sensibilisé au circuit court, aux produits locaux, bio avec de l'éthique. Donc ça n'a rien changer du tout. c'est plutôt j'ai adhéré au cairn et je pense que je vais essayer de l'utiliser aux maximum plutot pour aider le lancement du cairn que par intérêt personnel.

Q: L'utilisation de la MLC a-t-elle une influence sur votre épanouissement personnel, votre confiance en vous?
Cairn_A2: Il n'a pas encore eu d'effet selon moi car encore trop petit. C'est encore trop marginal. Voila moi c'est l'impression que j'ai aujourd'hui enfin les gens autour de moi qui connaisse le cairn, voire qui l'utilise pour moi se sont déjà des convertit. Ils ont déjà de l'éthique, ils font déjà attention lors d'achat. Donc du coup aujourd'hui j'ai pas l'impression alors peut-être je me trompe pas autour de lui en tout cas je vois pas de gens sont en train d'utiliser le cairn comme un moyen de transition de prise de conscience. Les gens autour de moi ils ont déjà la prise de conscience et donc ils souscrivent au Cairn.

Q: Avez-vous suivi des formations?
Cairn_A2: Alors non je n'en ai pas suivit. Seulement des discussions avec les amis en questions.

Q: Quels sont les éléments qui vous poussent à utiliser la MLC? ou rebutent?
Cairn_A2: Donc pour que j'en utilise plus, il faudrait que je m'inscrive à titre personnel. Pour l'instant je ne suis inscrit qu'à titre professionnel donc j'attends que les Cairn arrive dans mon entreprise. Don cfaire les démarches. Et puis il y a un frein c'est qu'il faut se déplacer pour aller échanger des cairns. Il faut aller au horaires. Le temps est donc vraiment important. Et donc du

coup les gens que je connais dans les bénévoles actifs du cairn mon dit “il faut s'inscrire n'y a pas de raison en gros donc voilà il faut y aller” C’est ça qui m’a poussé. Et je crois à ce genre d’initiative.

Q: De quelle manière vous impliquez-vous dans la MLC?
Cairn_A2: Alors non.J’ai regardé les réunions et comme je donne des cours de poterie c’est en soirée et les weekend. J’ai regardé et à chaque fois ça tombe pas bien. Et à l’assemblée générale je pourrai pas non plus y aller. Aujourd’hui je sais pas trop. J’ai longtemps eu des engagements associatifs. Je viens de lancer mon entreprise. Donc j’ai envie de soutenir mais je ne sais pas faire plus pour le moment.

Transcript - Cairn - Interview 3

Q: Comment avez-vous connu la MLC?
Cairn_A3: Alors les monnaies complémentaires, je pense que j'avais lu un peu des articles sur internet dessus. J'ai vu ensuite le film de demain et enfin le documentaire demain. Donc ça c'est pour ma connaissance des monnaies locales et ensuite pour le Cairn. En fait j'ai mon frère qui était association et j'ai rejoint l'association un peu plus tard. Lui m’en avait déjà parlé. Moi c'est quelque chose qui m'intéressait et puis un moment donné où il a besoin de monde au moment du lancement en fait. Je me suis dit je vais aller filer un coup de main quoi.

Q: Comment décririez-vous le fonctionnement de la MLC?
Cairn_A3: Alors pour expliquer à quelqu'un, moi ce que je dis en général. C'est que donc le Cairn c’est une monnaie locale et complémentaires. Donc locale parce qu’elle est faite pour exister, pour circuler dans une zone géographique restreinte. Une zone locale et complémentaire parce qu'elle ne remplace pas l'euro qui est notre monnaie internationales et nationales. Elle est complémentaire à l'euro. Donc d'un point vue fonctionnement en général je fais la comparaison avec des tickets restaurants qui sont en fait une sorte de monnaie complémentaire. Un moyen de paiement complémentaire qui permet de payer certains types d'achat. Et ensuite je dis qu'elle circule dans un cercle restreint d'utilisateurs donc il faut être adhérent pour pouvoir l'utiliser. Donc ça c'est le cadre cette cadre légal qui veut ça. Et le cadre légal veut aussi que un Cairn soit exactement égal à 1 euro. Et encore plus que pour chaque Cairn en circulation un euro soit provisionnés sur un fond de garantie de telle sorte que l'on ne peut pas créer artificiellement de la monnaie. Et qu’en cas de soucis entre guillemets tout le monde puisse retrouver des euros à partir de ses Cairns.

Q: Que pensez vous de son fonctionnement?
Cairn_A3: Ce que je pense c'est que le billet c'est pour moi c'est que ça reste le type de monnaie de base. C'est normal de commencer par ça. Quand je compare à un ticket resto c'est que en général en france les gens encore des tickets restaurant physiques. Il y a plus de gens qui ont des tickets restaurants physiques que des des cartes. Là où je trouve que c'est assez limitant c'est potentiellement plus pour les professionnels en fait pour ce qui est de payer des factures. Payer les factures c'est bien de pouvoir le faire de manière électronique alors ça s’adresse surtout aux professionnels qui en plus sont ceux qui en fait ont le plus besoin de dépenser et d'écouler des cairns. Pour moi un particulier ça doit pas trop le gêner de payer en espèces parce qu’on va dire qu'il a un volume de dépenses, un volume de transactions en cairn qui est bien plus faible que le

professionnel. Pour moi c'est plus pour le professionnel que je me dis que la mode électronique serait importante. Pour le particulier aussi et pour le particulier se serait dans le sens de plus avoir à se déplacer dans un comptoir de change. De pouvoir quelque part créditer un compte cairn qu'il y aurait sur un téléphone ou sur une application quoi. Et non par contre un des atouts du billet c'est que c'est un super moyen de communication pour la monnaie puisque c'est quelque chose qu'on a dans son porte monnaie. Moi quand je parle du Cairn à quelqu'un qui connaît pas. Et ben je peux sortir mon porte-monnaie, sortir des billets. Chose que je ne peux pas faire avec mon application. Enfin c'est vraiment un objet physique, un objet physique qui peut passer de main en main et être montré. Et justement c'est physique et palpable donc ça existe c'est pas juste un projet. C'est pas une idée saugrenue un peu de rêveur. Non c'est vrai billet, il une sécurité dessus il ya un vrai ça a quelque chose de concret et sérieux.

Q: Comment utilisez-vous la MLC? Fréquence? Montant? type de dépense?
Cairn_A3: Alors moi, le Cairn je l'utilise au final j'en utilise assez peu. Je passe plus de temps à l'asso du Cairn qu'à dépenser des cairns. En termes de dépenses, j'ai des dépenses sur des courses que je fais. Je vais régulièrement dans une épicerie sans emballage qui prend les cairns. En général quand je vais au bar des fois j'essaye relativement d'aller dans ceux qui prennent le Cairn aussi. Donc j'en dépense quelques-uns comme ça donc c'est plutôt des petits montant. Enfin sur les courses c'est pareil, je paye juste une partie en Cairn en fait. Je paye pas complètement en euro. Pour 50 euros de course, je peux filer 15 en cairn. Et peut être le reste en euro. Et après en achats ponctuels, pour noël dernier, je me suis dit c'est que je ferai tous mes cadeaux de noël en Cairn. C'est plus un autre moyen de dépenser. C'est pas des dépenses de tous les jours exceptionnels mais je trouvais ça sympa dans la démarche. Et au final c'était bien pratique puisque ça m'a donné des idées de cadeaux.

Q: Avez-vous changé de lieu de consommation?
Cairn_A3: C'est à dire en partie c'est des endroit dans lesquels j'allais déjà où du coup j'ai été très content de pouvoir payer en cairn. Typiquement l'épicerie sans emballage, des choses comme ça et en autre parti dans le bar où on va souvent qui accepte le cairn. On n'était jamais allé avant de payer en Cairn et j'y retourne. Donc ça c'est un peu des deux. En tout cas quand il y a vraiment des, pour des bars, des boulangeries, pour des choses comme ça où il ya vraiment un grand éventail de choix. Je trouve que là ça permet bien de réorienter vers chez qui on va. Après voilà vu que je faisais déjà un peu attention comment consommer ces choses-là. Ca n'a révolutionné ma manière de consommer. Voilà c'est en tout cas moi dans mon mode de fonctionnement, ça n'a pas tout changer mais ç'a eu vraiment un apport, un impact.

Q: Est-ce que l'utilisation de la MLC a influencé votre engagement écologique? Politique?
Cairn_A3: bonne question dans les grandes lignes non. Après c'est un comment dire c'est une corde de plus à mon arc un sujet de plus de conversations et de débat que j'ai avec les personnes autour de moi. Mais ça n'a pas changé mon positionnement quelque part. Ca m'a plus conforter ou renforcer. Donc j'ai une corde de plus sur l'aspect consommation de ces idées sociales politiques etc.

Q: L'utilisation de la MLC a-t-elle une influence sur votre épanouissement personnel, votre confiance en vous?
Cairn_A3: La encore non je dirais que ça n'a pas changé beaucoup de choses. Mais pour autant c'est quelque chose que j'ai en commun avec certaines personnes. Quand je discute de ça et que

je suis avec quelqu'un qui lui aussi utilise le Cairn. Et comprend du coup un peu la démarche est tout ça. C'est assez valorisant et c'est quelque chose qui est vu de manière plutôt positive en général. Même par des gens qui ne connaissent pas. Les gens sont plutôt intéressés donc c'est assez valorisant plus tôt je dirais. Et puis voilà quelque part je pense qu'il est un peu lié par le fait de vouloir faire partie d'un cercle d'utilisateurs mais c'est vraiment c'est vraiment ouvert. C'est assez marginal quoi. Ca n'a vraiment pas révolutionner, ne m'a pas trop changé individuellement quoi.

Q:De quelle manière vous impliquez-vous dans la MLC?
Cairn_A3: Alors moi je m'implique pas mal sur ce qui est à venir est événementiel, sensibilisation. Donc être présent sur différents événements: tenir des stands formation, des comptoirs de change, parler aux gens. Donc voilà je m'inspire pas mal sûr expliqué la démarche, parler, convaincre les gens. Un petit peu sur du démarchage aussi et puis c'est surtout sur les événements si j'ai donné un petit peu aussi sur des sur des projets des projets étudiants pour répondre aux questions des étudiants. Comme il ya pas mal de c'est un sujet qui pour étudiants soient enfin de type d'étude nous fait pas mal d'étudiants qui nous contactent. Par contre je suis pas du tout pour le moment dans les aspects dit opérationnel, administratif de l'asso: le conseil d'administration, comité de pilotage. On est organisé en groupe locaux pour chaque sous zone géographique et moi je suis dans le groupe local de grenoble. Et ce qu eje fais en générale, ce fait dans le cadre du groupe local: les animations; les démarchage.

Q: A quelle fréquence du coup?
Cairn_A3: A minima une fois par semaine à une grosse grosse fréquence et ça peut être soit en cas de réunion ou d'événements ou là il ya dois dire que la présence physique est vraiment requise ou alors sinon de manière plus des choses que je peux faire de chez moi par mail ou appeler quelqu'un. Une fois par semaine et je fais ça en soirée je dois y passer deux heures un truc comme ça.

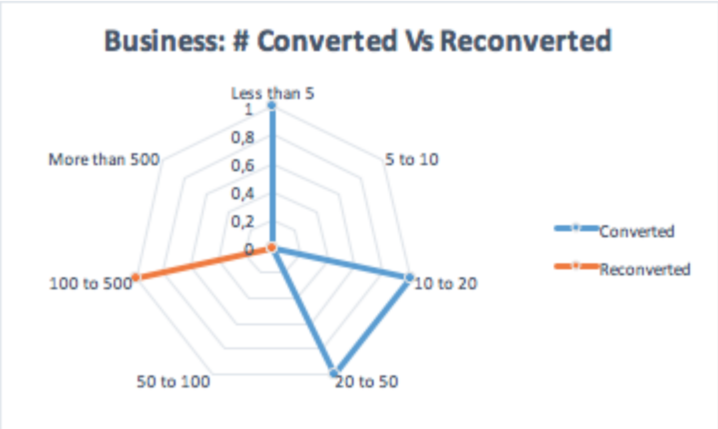
Q:Avez-vous suivi des formations?
Cairn_A3: Non. Aucune. J'ai vraiment appris sur le tas. Vu que je suis beaucoup sur la sensibilisation. mon discours de sensibilisation je l'ai fabriqué à partir de celui des autres. Mais du coup non jamais eu de formations.

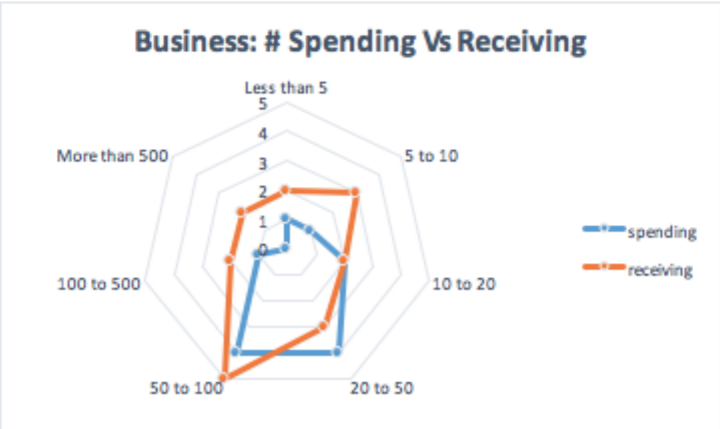
Data Summary Business Survey - Cairn

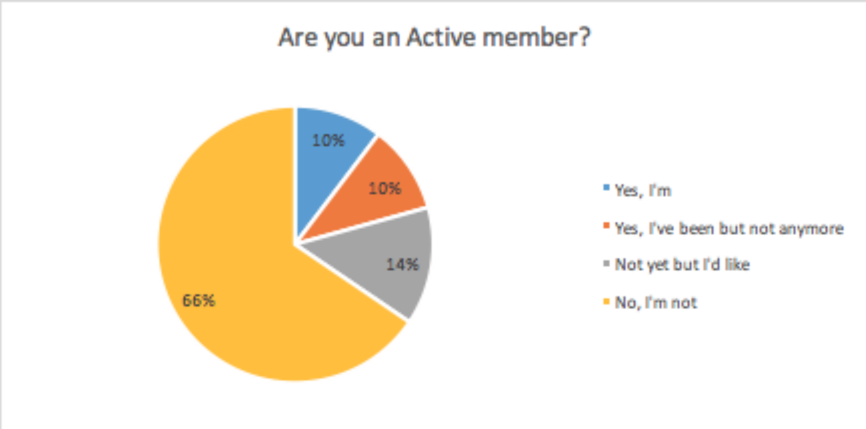
Index	Objective	data		
13	Waste Management	# participation	# Agree and strong Agree	% Agree
		29	6	21%
14	Water Management	# participation	# Agree and strong Agree	% Agree

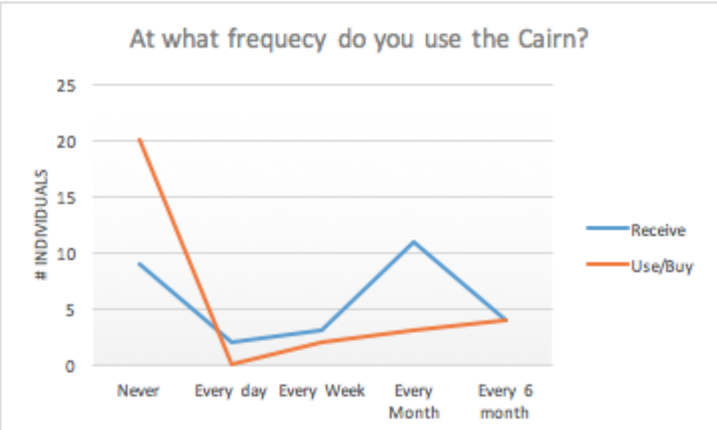
		29	1	3%
15	Green Economy	# participation	# Agree and strong Agree	% Agree
		29	3	10%
22/50	Participation	# participation	# Yes	% Yes
		29	12	41%
23	Friendly User	# participation	# Yes	% Yes
		29	21	72%
24	Intelligibility	# participation	# Yes	% Yes
		29	20	69%
48	Diversity	# participation	# Producers	% producers
		29	11	38%
67	local growth	# participation	# new business relations	% new business relations
		29	3	10%
68	Increase in Profits	# participation	# see an increase	% see an increase
		29	2	7%
69	Local Consumption	# participation	# Produced Locally (>80%)	% Produced Locally
		20	17	85%
70	Currency Exchange	# participation	# receive salary (without en reflexion)	% receive salary
		29	7	24%

70	Currency Exchange	# participation	# receive salary	% receive salary
		29	9	31%
	Opportunity building : new Opp	# participation	# Yes	% Yes
		29	7	24,13793103
	Opportunity building Constraining	# participation	# Yes	% Yes
		29	14	48,27586207









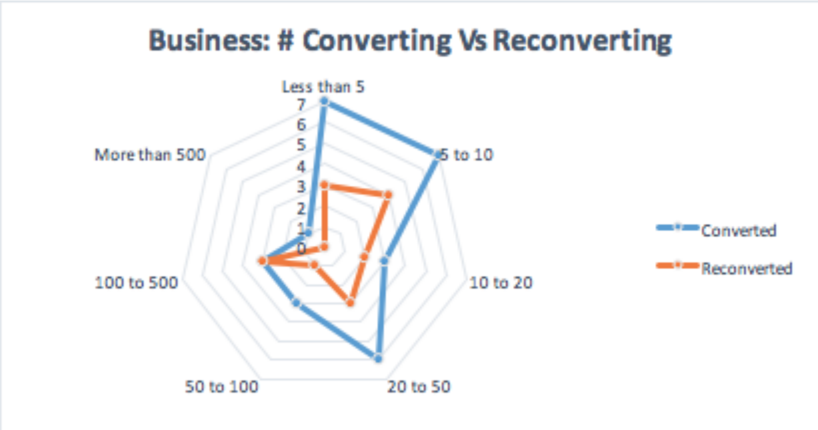
Data: Gonette

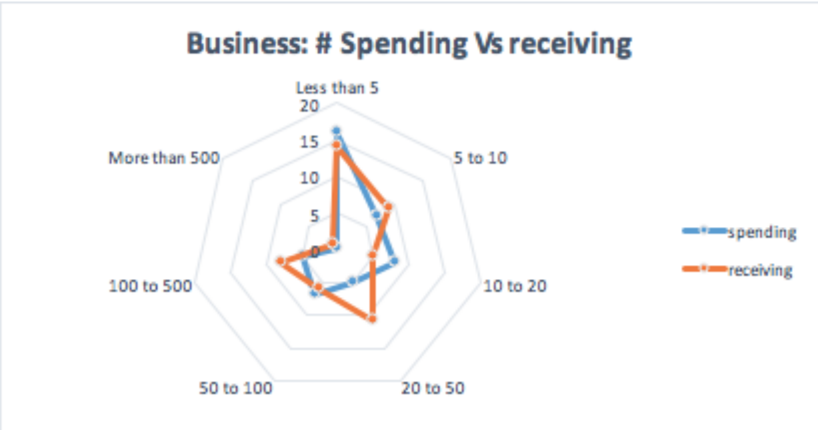
Data Summary Business Survey - Gonette

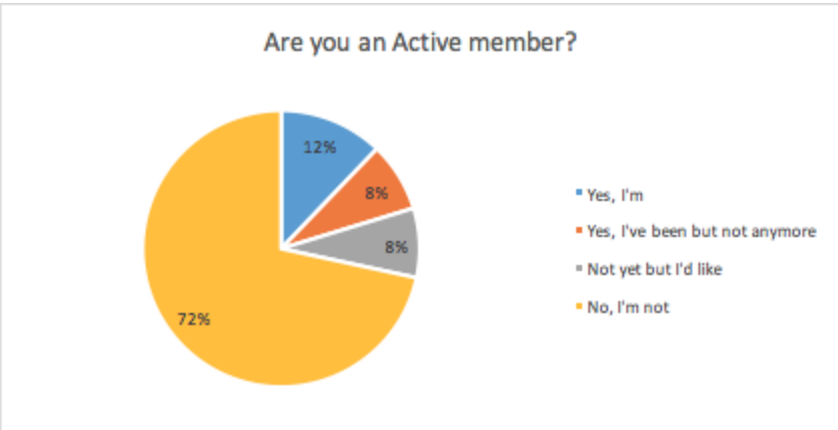
Index	Objective	data		
13	Waste Management	# participation	# Agree and strong Agree	% Agree
		74	20	27%
14	Water Management	# participation	# Agree and strong Agree	% Agree
		74	12	16%
15	Green Economy	# participation	# Agree and strong Agree	% Agree
		74	26	35%

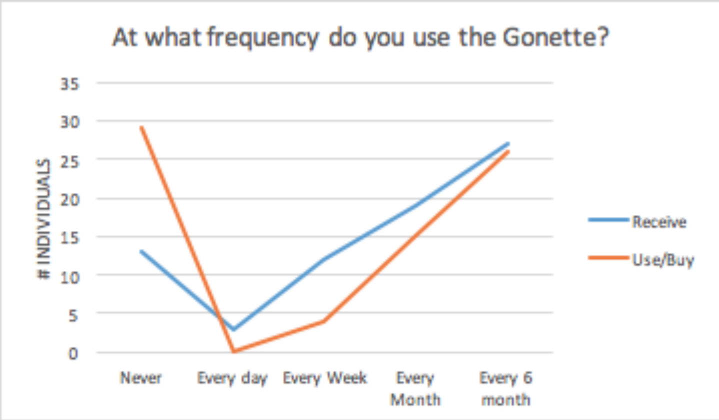
22/50	Participation	# participation	# Yes	% Yes
		74	41	55%
23	Friendly User	# participation	# Yes	% Yes
		74	50	68%
24	Intelligibility	# participation	# Yes	% Yes
		74	55	74%
48	Diversity	# participation	# Producers	% producers
		74	10	14%
67	local growth	# participation	# new business relations	% new business relations
		74	5	7%
68	Increase in Profits	# participation	# see an increase	% see an increase
		74	5	7%
69	Local Consumption	# participation	# Produced Locally (>80%)	% Produced Locally
		44	37	84%
70	Currency Exchange	# participation	# receive salary (without "en reflexion")	% receive salary
		74	12	16%
70	Currency Exchange	# participation	# receive salary	% receive salary
		74	18	24%
Viabilit y	Opportunity building : new Opp	# participation	# Yes	% Yes

		74	16	0,216216216
	Opportunity building Constraining	# participation	# Yes	% Yes
		74	26	35,13513514









Data: GEM Project

Transcript - GEM Project - Interview 1

Q: I'll start by asking you about your projects and what how the GEM project has been integrated or working for you?

GEM_A1: Sure, so I lead the XXXXXX initiative which is an educational nonprofit. It's got offices in the US and here in South Africa. We serve about a thousand youth by providing educational programming to specifically disadvantages in the township of XXXXXX. We provide two educational holiday camps, a computer literacy course and after-school tutoring program and a youth leadership development program. The two holiday programs happen during the main holidays, one in January, one in June and July. The computer literacy program happens every Friday during the school semester. So that's about forty Fridays in a year. Then the after-school tutoring also happens once a week on a Wednesday, every Wednesday during the school term. Then the Youth Leadership Program, we have ten contact sessions with them no basis. An aim of the organization is to equip students with the skills required to succeed in getting University applications but also career opportunities. So far we've served about 7,000 youth and we're in the phase of replicating this program in another Township. We partnered with the one of South Africa's major universities, University Pretoria. So they offer us access to their facilities. There's a campus in XXXXXX. The idea is to replicate this model in communities where we have major universities and use it as a tool to allow students who wouldn't be able to access these universities the ability to go to university.

And then how GEM has assisted over the past year, I think we started with in November of last year the cost of the programming is quite high because we rely a lot on volunteers. So we mobilize about 300 volunteers a year. During our holiday program, the January and the June one, we get students from the u.s., from your ivy colleges your Harvard's Princeton Yale's MIT. They come down and they volunteer in our programme and then we get volunteers from local universities in South Africa. A lot of them over the last seven years have also come from the local communities. So how GEM's helped us is by offering a two fronts I would say. The first front is offering a way for us to appreciate our volunteers. We try and cover the cost of their transports to get the volunteer to the location. They're giving up a lot of their time and we can't pay. So this is a way of sort of incentivizing our volunteer process and gifting them in the form of rewards, volunteer GEM rewards. The volunteers love them. They really enjoy collecting these GEMs. We've only done this in one program the computer literacy because GEM doesn't have the capacity to do it for all of our 300 volunteers so we just decide to test it out with the 25 volunteers that go on a Friday that who success there especially amongst volunteers from the township who are don't have jobs and are how do I say it, their economic background is not favorable so getting essentially a 120 Rand, the equivalent of $10 a month is almost like a extra income for them something that they receive because a lot of them don't have parents a lot of them I lead childhood child headed house households where they live with their grandparents so kind of hard to give them an allowance as normal you know middle class university students would get or teenagers would get so I think I've enjoyed seeing. The second part is it just also allows us to keep track of who's volunteering just that database has contributed substantially to that and also exposure I think the third one I'll talk about is exposure being able to be on a platform that can bring us new volunteers not that we've seen that many but I like that for that's the that the platform allows for potential volunteers to book a volunteer experience online on the app so yeah really really benefited from it did a tally of how much we've spent from spent close to five we've received we've been able to receive 5,000 Rand worth of GEMS from GEM which really equivalent to about 500 dollars and that's a huge percent of a budget for that program which is quite beneficial.

Q: Proportionally, how many people joined thanks to GEM?
GEM_A1: I'll say maybe one or two because we already had volunteers of the gem platform is out says for organizations that are trying to galvanize volunteers while we already had 20 about 20 22 volunteers and then we got a we got maybe two extra ones through the platform out but you know it wasn't a huge focus for me I was trying to get new volunteers I think my aim was to help compensate the volunteers that we do have such that we can retain them because I think of needing a volunteer led organization is retaining volunteers is always the hardest thing to do so when you find a platform like GEM which allows compensation where you don't have to pay and really helps with retention rates.

Q: How do you measure the value of the work done and how many GEMs are awarded?
GEM_A1: i I think I'm in terms of value they have to complete an entire session from start to finish before they are awarded the GEM so we have a register that it's taken at the beginning of the program and at the end of the program and because we've trained the volunteers there's certain things that they have to to teach per day so I think for us it's just about making sure that they reach the targets set out by the outline of the day such so that they can so we're able to complete the lessons in the forty weeks yeah so that's how I wouldn't say that we give tokens according to their ability to teach because they're volunteering we do train them but if they don't teach well we don't withhold their gems. GEM gives us a fixed amount of thirty gems per session so so it's the the gem project that chooses.

Q: What is the background and social background of volunteers that get rewarded with GEM?
GEM_A1: volunteers two volunteers okay most of them are University students I would say 70% of them are University students either studying at local university or other smaller institutions there's one who's doing part-time work so a lot of them are specifically between the ages of 18 to 25. I would say, let's say 50% middle-class 50% low class ok ok

Q: What kind of knowledge is required and what kind of knowledge/Skills do volunteers develop?
GEM_A1: A lot of them develop a lot of leadership and presentation and communication skills that they wouldn't get anywhere else. We also provide reference letters for engaging with our program and so we always on the lookout to see who's developing as a leader so that we can give them opportunities to lead in various aspects of the program and yeah I think there's a those are some of the skills leadership and a lot on communication team. Teamwork skills the skills to be facilitate yeah I think those are them prime primarily

Q: What influence does the volunteering have on the general well-being of the volunteers?
GEM_A1: I think one of the reasons were able to retain a lot of our volunteers because they become part of the the family of the organization. So people who just had a conversation with someone who said he didn't have a lot of friends but as soon as he joined the organization and started volunteering he was able to find new friends helped him through many things that he's gone through I think also their softskills that we can't really track like you know two different groups of people people from disadvantaged communities and I would even say privileged youth coming together to work together to kind of impact a community so there's a is a bonding and unification that happens and also racial bonding as well because we get white volunteers, black volunteers, Indian volunteers so it's a good cultural mix so representative representative of Democratic South Africa that we live in now yeah so it was a there's a soft thing soft skills act and volunteers experience tonight and a lot of them do. it's countless stories of volunteers going through difficult things but they're always so positive I think this community of volunteers affords them the ability to no get away from what they might be going through at home and just come in and have fun and give back to their community

Q: How do you think that the project tackles social inclusion?
GEM_A1: I think it gives like I said before incentivize volunteering and I think in South Africa we we have so many issues that require civil society to come together to come up with solutions to address these issues and I truly believe that a lot of these issues will require people who volunteer their time so I think GEM as a platform connects the people who have the resources to organizations that don't necessarily have human resources to action out there programming and it connects people that would usually never connect people would never go to a Township kind of facilitated through an easy process of hey okay I can get and I can go to this Township I can volunteer my time. I'll get to know people in the community and I think also for the people in the community allows them to interact with people from different societal backgrounds and cultural backgrounds which allows for those you know the right conversations to begin happening around privilege and the inequalities that we have in South Africa like we've seen in our organization a lot of those things come up and instead of pointing fingers we challenge the volunteers to come up with solutions to solve these social injustices so I think the beauty about the gem project it really allows for people to connect to the community in a very innovative way but it also gives the community itself the ability to kind of impact their own community and better their own economic standing by being rewarded a small fee right I mean it's small but it actually makes a difference you know thirty rand to someone in the suburbs and that 30 rand to someone in the township it's completely different I remember one of my volunteer said that this is the the gems that we reward he uses the funding to buy his own airtime and these families in turn I know of another student who uses it to buy electricity for his family as well you know about the volunteers that they

use the gems to buy I think there's a KFC voucher on it so he was able to buy KFC for his family after saving a bit so for for someone in in the township it's a lot of money for someone in the suburbs might not be a lot but it it's also a nice incentive yeah to say hey I don't have to spend five hundred grand on a time I can spend four hundred because I got a hundred when I was volunteering.

Q: Do you help to develop, to create awareness about the gem project ?
GEM_A1: within our organization, we do in our volunteer training days we advertise that if you volunteer for this program you get certain amount of points marketed on our Facebook pages Instagram social media but some a majority of it is from the volunteers in the program they tell their friends hey you know come volunteer with us and then you know we get these gems but beyond that it's not about the gems it's about volunteering therefore they become part of the community.

Q: how intelligible is the project for the for the volunteers? How well is it comprehensible regarding the means of payment the app the ussd?
GEM_A1: I think in the beginning it it's an attentive we had to do a lot of we communication I think maybe that's a part for GEM to work on just making the communication a bit more bit more easy to understand you know for some volunteers they just literally downloaded the app on their phone and they were able to access it. Some struggled with getting that code some struggled because of the type of phone that they had and then there were just some some administrative things on GEM side that they needed to fix the glitches on but yeah I would say I'd give it a solid 70% in terms of usability okay if communicated properly.

Transcript - GEM Project - Interview 2

Q: I'll start by asking you about your projects and what how the GEM project has been integrated or working for you?
GEM_A2: it's a nonprofit organization and what we do we organize after school academic sessions tutoring sessions for students, high school students from grade 9 some grade 8 9 10 11 and 12. We invite volunteers, the tutors of course and the tutors are usually and learners that have passed metric in the tertiary institution is that a college or a university. Which they come out voluntarily, we don't pay them but we do pay them the travelling fee for our to arrive to the to the branch so what transport used to come and to come to the branch a we will reimburse them the same amount of money but for the system this itself yeah they don't get any money for session and this that's why we the the change is like a little um a little something that we can give them course like I said to be a non-profit as I said we are not able to pay them where they either do the same work in another organization same they might get like a letter a stipend or something but being not able to do that so the GEMS are they something to keep the internal extra things or besides the money or for the transport yeah so that's basically what we what the GEM actually do what we do with the GEM who for our volunteers

Q: How long have you been working with GEM?
GEM_A2: That's something I can't actually ask answer because I've been working with GEM since I started here and I've been here almost a year. it will be a year. The 22nd of this month it will be a year. So since I've been you know acting in XXXXX. I've been working with GEM I've been working with XXXX and then he moved to XXXXX so yeah but before that I

know the branch have been working with GEM also for a while but I'm not so sure. So from my point of view I'll say yeah but it might be longer. If you talk to my colleagues or other branches it might be more than a year.

Q:How do you measure the value of the work done and how many GEMs are awarded?
GEM_A2: Our program changed a little in our branch from last year to this year. Last year we had three. It was a Monday Tuesday we just get this correct Monday Tuesday Wednesday Thursday then Saturday yes. We had five tutoring days in a week last year and was reduced from five to three camp this year. And the reason for that being is that our tutors are to the numbers because we are branch is the only branch located very far from the nearest University. It will be difficult for the travel each day because our nearest university is in Cape Town. It was difficult for them to travel so much during the week. So we reduced it from five days of tutoring until three. They get rewarded for every time they arrive in that week. If they come once a week, they would get, because I usually I'm not sure how much. It changes sometimes they get thirty, sometimes they get ten so it ends on how the GEM are. how much they were wanting to give to the volunteers and I know it is Thirty. So it seems for every time they arrive so if one volunteer arrives say two times to compare it to the other one who just came once a person look it's two times gonna get more teams obviously. We always saying that the more times you come the more Gems. I'm not quite sure who chooses the amount. but when I send because every week we have to send out a list of of the volunteers of the past week. So in that big payments are made when they paid the GEM was the following week so on a monday, Tuesday we will send out these lists now on the list and the email I usually state that this person came on a Monday only, this person came on a Monday and Thursday, things like that I lose this moment stipulated like if when the payments are made. They take that into account or do this is pay everyone the same amount. But I and when I was told about things I was actually told that they get paid for how many times they come because our volunteers are not very active at the branch it's so hard are so hurry just to get to the sessions and then after that they leave so we never get in get to talk them out about how much gems they get lost because the week before that the only thing that tell me that yes they will receive gems but they don't tell me exactly how much.

Q: What is the background and social background of volunteers that get rewarded with GEM?
GEM_A2: There's no requirements when it comes to backgrounds, anything so the only requirements that we have when we're recruiting volunteers is that they have to pass metric number one. They, it doesn't have to be optional for them to be at the tertiary institution but it will. So if they are at a tertiary institution, It's fine but if they're not and they are at home maybe or they are working or they are doing a learning ??? but they still want a volunteer then we will look at the metric marks. So a tutor in a certain subject a active sixty percent in that certain subject so if they were on a tutor in math mats so they actually in six at least 60% in maths. A matrix in that certain subject but volunteers that don’t meet these requirements of the sixty percent. We still let them sign up to be volunteers but we don't we don't let them tutor. We give them other like other tasks. Like maybe they can because we have a lot of workshops and a lot of programming training. Like we have a book club. We have computer literacy program granting. So these if they can at least facilitate these programs then as well they can also sign up for that in not tutor because then this it has to be part of those crew on those programs so these requirements around the background is

only people that are willing to come and not able to count in that requirements around the 60% or the tertiary introduced. They are willing to come.

At the moment, we found that most about our tutors are tutors from a low-income background or a poor background. We can say like because they have this opportunity and now they can give back so most of the like 90%. I can say about tutors or tutors that are in living in a certain area that is not very underworld area as I can say that like 90% of the tutors come from those kind of backgrounds. A very poor background, not doing nice. In their minds, they are take court opportunities to go twice come to pass high school to go into your tertiary institution even go into work with learner's to all those things now they actually just want to give back to the community. so yeah then they sign up and in their part of the program so yeah that's the kind of background our tutors mostly have.

Q: What kind of knowledge is required and what kind of knowledge/Skills do volunteers develop?
GEM_A2: We are an organization that believes in growth in personal development at all time. We ask as workers or employees constantly come to training for everything. If something new comes in, we get training on and that specific task or something new system. So when it comes to tutors, we have a process of - it's a tutor training. So the rule is that no tutor that signs up they can't tutor before they go through this training it's a basic training test that rent plane is going throughout the year but the first training is always the basic training how to tutor, how to facilitate, how to be in the in a sitting across from sitting over a sitting with his children , how to answer certain questions, how to resent us up. all the type of things that that they at the tutor training have to go through before they step into a class room or a tutoring setting. After that it's more it gets a little bit hard at training these other terms I'm trainings that cause instead a bit deeper into how to tutor that's watch the materials that you can use before that it can do when things come up. There usually are an employee from the branch to attend the training as well as a tutor. So he as well getting knowledge as the same as employees so when the tutors aren't able to come. Then B as the employees as well as the knowledge but what we try to do we try to move away from us the pro listen to what and let the volunteers drive decisions most of the time but we need to know what's going on so most of the trainings that happening is for volunteers around the book club. the other problems that I've mentioned is around it's actually for the volunteers. but we as employees also needs to know these things. Some volunteers that not is not able to attend these trainings we actually have to act when we come back with the knowledge. We have to actually have to go through a separate training with Branch's training and mini branch training. As employees at the branch, actually train the tutors then in the aspects that that we was just told a week or so before so. They constantly are getting more training constantly getting skills and got a lot the last training that I of the last so that the tutors went to in this year what as actually for a book club what funds are a a short story publishing. They like to start reading so it's a nice organization that actually once gave us books and actually invited us for training to run these systems so yes my colleague with two volunteers actually too windy so yeah this comes in a training happening and so we also quizzed him to to when things come up when they are young about things that they want to do they it's great to to let them shield with the branch so the branch can make plans around is this feasible for the branch, can actually afford, can we actually I'm able to pull it off in anything like that and if it if it's okay in all the right angles then yes of course we encourage them to actually attend

these workshops attendees I'm training that I want to attend to actually come back to the branch and each share their knowledge.

Q: What influence does the volunteering have on the general well-being of the volunteers?
GEM_A2: I think since I've been working here for a year now so after the after this all time I've seen a lot of our volunteers person like as I can see people as more vocal. people as more out there more coming to put their name in front because when they signed up you could have seen the a little bit shy a little bit afraid of the class a little bit not not not knowing how to control across and even conduct a session with a few bunch of kids. But I've seen that they actually taking initiative now I'm actually asking for sessions to be out there actually asking for extra classes or something different because I schedule the the weekly schedule for the week but if they ask me to do something because the previous week they've noticed that the kids are actually struggling in this section of work. then I actually took my schedule just of fifty because they are extra told me now they can move on because the children are so busy with this so then I will reschedule the schedule that I made just to fit in with that. so I've seen that they are coming up and see getting on voice now actually and actually being part of the branch not just going with the flow. Just taking what we give and then just implementing but actually giving the ideas and keeping their input. We actually have this we call it a strategic planning weekend every year we we really as a branch with our volunteers actually plan out the programs and what we at the branch go through to implement and do this program effectively as possible so we we did that. I think that's the best time to actually see the change of in tutors because then they moved us together as a group as a unit because they they come they came this separately but in but the trainees and the workshops they're constantly coming together. They actually now building a relationship with actually in groups actually brainstorming on certain ideas so yeah you can literally see the change. It took a little bit time it always takes time and it's not always perfect because everyone has to last like a lot time to go move to to work but I've got a little II seen them improving in then it had expect of having some friends now inside the branch. and actually they still communicating outside because now they realizing they are at the same University. and they are travelling to the until your body branch. So why not connect that side also so I've seen things happen. We also try to come together not just at the branch but also go do something fun as branch so last year one of the things that we've done wind move we went to watch movies together a group we went to to climb one of the mountains here and it came down as a group lie in it. so things like that to constantly let them not only can see that we constantly just want them to work work work and help other learners and let them grow the team succeed but but as well as looking after our tutors and make sure they are well they are well looked after and anything that they are we through as well we know that they want a student-led University and we understand and we help where we can so a lot of them come to us and say I bet they need a book or help on this and then we try and I'm just possible to assist them on that just to make sure that when they come through the process that the issues that are that we can do something about it's not an issue anymore we try as much advice because we have been they we have passed we have succeeded so it's always time to be like a mentor to them as well oh the mentor up for one another because some are doing the Masters way others also
degree also yeah they're constantly giving each other advice as to going forward in the careers in the career path. so I think yeah coming for the time I've seen below yeah I've constantly seeing efficiently personally. Inside the classroom, outside the classroom and lately you can win when they come in first it's you can see the change but like I said took

time because some of them it's I be near for since the branch started some just started this year so yeah we just find finding the new signups to get them into the same group because the new signup actually from a different, they afrikaans spoken so and now most of our volunteer are african spoke them. so I think it's it's good it's it has been a little struggle to get them to connect but I've noticed at the last meeting that we had that actually they can work one another they can actually connect and even though they're not speaking different languages like they found the language that they can both communicate and see the ideas so are constantly there is issues coming up and negatives are things are clashing all the times personalities and things but at the end of the day as a group we come together and we try to try to to speak my mind to share these issues and to get solutions as best.

Q:Proportionally, how many people joined thanks to GEM?
GEM_A2: Not that I've noticed but I think to be honest we actually try to push that they if if volunteers actually come up and volunteer we have a sign-up chip online with say we DT will see from us and a lot of them say for folks posters thought it in the ad my sister my brother way into the bones always part of you come track things like that so no one after I probably speak out of turn but not from my side I believe us of name of anyone that signed up because of GEM. GEM is also is always a thing that was extra cuz they never actually we actually told them about teams the the last year that I've been here if we even knew volunteer when I say okay you always also get GEM then they're like oh so any of you you GEM for so chambers also or something extra but that wasn't whenever the the primary reason for them to come to the branch and ask questions or sign up anything.

Q: Do you help to develop, to create awareness about the gem project ?
GEM_A2: When we are recruit students um when we go to varsity's and we recruit students for to be volunteers. We put that in our proposal that teams are also one of the things that take I said we never put a lot of weight on that the only lowest. I'd to push this since why it's important for them to to attempt to to volunteer. Mostly for to help i'm to help learners from a poor background to to keep that connection of friendship with other tutors and all those things that I've mentioned but I like it whenever I'm 70% of the time our primary thing that we always say but we always mention it when we culture when we do we mentioned that definitely that they are awarded some GEM. I mean sign up they ask how gem work what what is the app you need data for the app things like that then they start asking questions maybe but the questions are as far as we as we can but like I said also been in all of them actually never signed up because of GEM but technically we say that when we are when we actually are recruiting.

Q: how intelligible is the project for the for the volunteers? How well is it comprehensible?
GEM_A2: I didn't my colleague gave me actually to take over from her because she has a lot of other things to do to take over the connection with me and as being the the spokesperson for the branch when it comes to GEMs. I've got like a little internal into what GEM are heard I never got the full download of me everything comes from what it can do with the app is actually working you think that I've never received that information so when I asked my coordinator, my colleague all this type of question series. Well she couldn't answer on to them to me she only gave me the basic that I've known until now. But recently when there was an issue around. There was an email that was sent out when they said that there was no payments for the month of April. Then a little bit more about how the how they gather the money which actually I'll take care of sponsors and things like that to get money. And make

it available in change and all those things so that was a little bit more information that I and there was only this like a month or two ago that I'd see that email and I got a little bit more information around what they actually do and how they do word and lastly I didn't even have that information. So I would say no I I don't have adequate information enough actually to actually go out and say but you get changed and GEM can do this and do that and make it a primary reason why people can sign up that's why I wouldn't push for something to push for saying that they should sign up for GEM when I don't have a lot of information. So I push the other thing other benefits that they can see but I would like to get more information I was wondering if there's a booklet or something that we can just do to get more formation around that because like I said it's been how long last year and since May May yeah you're lost it hadn't even had the information about how they're working out how do they get the money and what they actually can do it for. I only the I only get feedback from the from the volunteer saying that yes I bought this and I bought that and I mean that's and I got that so that was that if it's working for them and they actually using it. it's great but the new guys that are coming up. I don't know and so I don't know how to use it and what's the app and out and look at all those things.

Transcript - GEM Project - Interview 3

Q: I'll start by asking you about your projects and what how the GEM project has been integrated or working for you?
GEM_A3: So we're youth project in XXXXX and GEM basically one favored a few years ago yes yeah so basically how gems have assisted is that okay so the arrangement is that GEM partnered with us in order to service our volunteer that's right. So everyone who volunteers and gets some sort of rewards for the offer I mean for their volunteer time from GEM right. For us how that is assisted obviously and it's it's improved volunteer satisfaction in general. I know like on the weeks I'm like hey guys please don't forget our GEMs see next week so I know from our end it's assisted with that. Because everyone is motivated differently I can't say that this is the only this is the only reason why they come to our sessions however it's more of something that acknowledges their efforts a little bit. it's something that like adds to how we recognize them in them and their contribution. because a lot of the tim, the most we can do is like try have gatherings every quarter where people still have to. You know still contribute to some extent we can say thank you since in emails and char appreciation but this adds just a little bit more and shows them that we make efforts to try get partners involved to. You who recognize them and that our only priority is not just to take from everyone else and just give to the kids we work but for example the to try recognize and appreciate everyone around so it's assisted in that whole process of creating it's a healthy environment with the volunteers who go if they'd have to assist us every week. We can work with quite a lot of people on a weekly basis so it does how quite a bit.
Every week GEM, the GEM projects generalist generously gives us gems on a weekly basis. we concur even though agreement initially was that you know it will be periodic oh yeah week events or probably happen like every two weeks or every month or something like that but since when you working with them with the project for the past year so I've known David communicates with them two and a half years ago but only partnered with GEM probably last year. Every week since we started working together.

Q:How do you measure the value of the work done and how many GEMs are awarded?

GEM_A3: so the GEMs is directly accessed by them or the participants directly access them so all we have todo is submit unless so we just submitted list of of all the potential I mean sorry I own people who attended that week. Then GEM sends them a notification that their profile is activated because you either access it on an app or use ussd code and the people would access it using their phone. Phone themself a number profiles and they redeem their GEMs accordingly.

So we okay besides I think the treats is worth in it yeah so so you have a you have a cap to your to your participant list for instance you take ten twenty persons tops that can participate to do your weekly event with about 20 volunteers a week okay and it's let's say increase from last yell are you working with twinny had no issues of that yeah we just said okay yeah here's the list alright so there's no there's no problem at this point

Q: What is the background and social background of volunteers that get rewarded with GEM?
GEM_A3: so it's varsity student okay so yeah quite a lot of the people are so a lot of the time like our our volunteer recruitment processes overlap so people who work with XXXXXX in essence are also GEM so yeah so so a lot of ones a lot of our volunteers are from the universities around the area and a few young professional.

Q: how do they use the skills by volunteering with XXXXX do they require knowledge to they develop new kind of skills by by participating in in your project and
GEM_A3: So they don't necessarily acquire skills but they need to come in with skills alright so um for our program Maths and IT right that's an IT development in in specific areas right now we're focusing in XXXXX so the volunteers who come in need to know grade 8 and 9 . A lot more in touch with the content in the syllabus rather than having a forty five-year-old coming and shooter becomes a lot more like a lot more distant and also we're trying to work with relatability and all those other things but the skill set is math so you need to have past mathematics and high school mathematics pretty decently. Secondly when you work with people in the IT program you what we have is people who are involved at a tertiary level and starting IT so computer science and or some related field. So people come in with a skill set and they don't really I don't know get skill sets out things like interpersonal skills all that they get out communications build what I figured out. Because they to talk to kids the whole day and engage with them and see how they can be relate to and so on so yeah so our prerequisite is the hard skills and the soft skills we don't mind working around it. So if you horrible at talking to kids but you really want a volunteer we generally pay you up for someone who's really good at talking to kids just so that you're there's at a capacity so that you can see them both. So all the time those people also like break out of their shells and the soft skills are there. We've had quite a few of those because it looks like a lot of life in that you know yeah yeah that's right they come up a few soft skill.

Q:Proportionally, how many people joined thanks to GEM?
GEM_A3: I can’t say with confidence.

Q: What influence does the volunteering have on the general well-being of the volunteers?
GEM_A3: We do ask our our volunteers a little bit of feedback. What they've gained from the experience. How obviously we can improve it off of that. but from am like through asking quite a few of the differences they do say that it's helped them to manage their time

basically. Actually because you have your life during the week and through the weekend it's you know you do students for them it's like okay it's cool we wake up early on a Saturday because people have to wake up at the 7 o'clock. I'm sorry guys but people do that to make it to the programme. It help them with communication. It help management skills. It also improved their perspective of our society.
And It also create more friendship because you see these people every week. So it really creates it friendships around yeah because people let's say used to just wave each other way to like you should cause each other on campus and not actually stopping each other. And missing each other now the people have gotten to know each other a lot better so yeah me personally I've met like I've quite have quite a few friends from the team and quite a few of the volunteers.

Q: Do you help to develop, to create awareness about the gem project ?
GEM_A3: I know we don't that necessarily. Our end personally as an organization no but we know our volunteers do that. So they make you feel quite aware of the feedback about Jake's funny enough okay I don't know yeah the experiences of them that's quite interesting you're getting free stuff in an environment you didn't expect to get free stuff. like I'd like picking up backpacks and well I think go to the movies I'm like it's quite expensive, it's me it's how expensive a movie ticket is like no but like I know I know they increase the awareness on their end. um so like when they go recruit new volunteer so so obviously for our in behind tell a friend to join us or whatever it is and like one of the advantages that listen like hey you can release illegitimate GEMs and you'll get free stuff up. for example we should try to benefit so people have become aware about GEMs do that you're out different volunteers who spread the word about their experience.

Q: how intelligible is the project for the for the volunteers? How well is it comprehensible?
GEM_A3: I've never had people entirely complain about it. its user friendly so I know on my end I haven't really used ussd as this because I've like logged in using the app and the app is quite simple to use. These are great like one set like or apps you go through one you're acquainted yeah and this is not the type of app we have to go through five million times it's very simple there about only like five different windows. you can potentially go to um we've never received large issues about how people can redeem their gems. so the app doesn't have a complexity to it um I think the biggest thing would let's say be what would less they be the registration process. okay yeah so like I know I only had like an issue with the registration process at some point because it was confusing but in terms of that it was probably just a me issue that I probably wasn't updated on to the system but I've never heard anyone complain I come to a saying they're not I haven't gaining access to their gems they can't find them it would only be a thing that you know my GEM didn't get paid out and it's like oh my gosh we missed you on the list it's quite a user friendly app I have easy to you to redeem the only issue up it may be sometimes the retailer's may be like oh my gosh we have to redeem your points. This is so much work for us just like getting cash so people have said ohw.
I haven't it's a at someone who's never come across it before what their perception is a little whether or not they understand it only lets say engage people who have a sense of it and they all they all understand its objective and they they kind of understand what's going on. so there's not a lot of explaining that instigate that so let's say we have had volunteers who come in here oh no gem like hey guys, this GEM who partnered with and you are basically going to their objective is this and you get this out of the relationship. and they're like oh

okay that's simple that's care how do I get on board? Download the app oh here's a ussd code and I like excite and there's no really a follow-up but the overall perception of it and hasn't been negative I haven't gotten a negative or non user-friendly perception of it that I've seen it on social media or from people have engaged with the GEM.

Transcript - GEM Project - Interview 4

Q: I'll start by asking you about your projects and what how the GEM project has been integrated or working for you?
The project started with XXXX which was a pregnant stray dog with only 3 legs. She got runned over by a train. Like many organisations it starts with a story. She was XXXX now she XXXX. You know cruelty is all over the world so she has 3 legs only but she is quite a happy dog. But that's how that started. The main aim is to, education is one of it, but to sterilize as many dogs and cats as possible so that not more get born. And that quite a bit of education. Everywhere there are stray cats and dogs, they just get more and more and more. And then they get abused. You know you get 10 puppies around. Then they get kicked in poorer communities. We don't just take any cats and dogs. Very much neglected. What we achieve with the neglected animal, how you can get it adoptable and be the best dog ever. Normally, if you think the best way would be to put it down, financially etc. But people are willing to go the extra mile and that's what we stand for. We take the worst case scenario and make something good of it. So we do it outside XXXXX on a farm that we are lucky was sponsored. It's a 22 hectare farm with a little clinic which is not 100% operational to the public but only for us. And we still building a lot.

GEM is now quite well known by now in south africa. Going the Extra mile is obviously the others word for GEM. So what we do is, on the weekend, saturday and sunday, we have 2 things: Sterilization drives as well as just visiting the poorer community around us. And all we do is we go there because people they think we want to take the pets away and that's not what we want to do. So we do a dipping session, dipping for ticks and flies and XXXX. And while we just do favor to the community, we take a sense of who's the owner, is the pet sterilized. We bring some food that we got donated. You know if you give something, they will bring their dogs. Otherwise they will keep their dogs in the backyard. At the same time, we are trying to get the animal sterilized. To do all of this, go into the community, we need sponsorship for food and blankets also and we need people to come. You need quite a few hands even with one dog. We don't do cats but we also take a look and give advise. Or we give some treatment but then we take the cat and bring back. I always buy some sweeties, some lollipops and I get the children. And I tell them: "bring me some dogs and you get the lollipops". But they also help me with the dipping. They come to watch sometimes. But if you educate those young ones before they get to drugs and stuffs. There are our future. That what I enjoy. Impact their lives.

Q:Proportionally, how many people joined thanks to GEM?
GEM_A4: Plus minus 10 come every month. Some just come visit, some might stay. Not everybody can come every weekend. But 10 there and 10 there, at the end you build up. People are working and have families. People come twice a month also but through that we get volunteers and they get rewarded 30 GEM every time they come volunteer.

Q: What is the background and social background of volunteers that get rewarded with GEM?
GEM_A4: General, it will be educate people. Not people of the poorer community. I don't think they even know about GEM. They are not encline to take part. So it will be young people from 20 onwards. We get a lot of 40 year olds and lonely people who come to socialize. The background is mainly the white. Well, they also can give. not only just time but also financially. People with resources because in the end its what the foundation needs. They are some teenagers coming, obviously the parents are the financial providers. They enjoy coming and are quite impressed they can earn some pocket money because you can buy with a 120gem (a couple of times) a movie ticket. Some parents, I must the kids must work for their money.

Q: What kind of knowledge is required and what kind of knowledge/Skills do volunteers develop?
GEM_A4: When anybody comes to volunteer, anybody has something to offer. I can that somebody is a little skittish of a dog especially when it is a school project they have to do. They maybe don't want to be there. Well or a friend brought another friend, and I can see that. I enjoy reassuring the people. But by the end of the day they are not afraid anymore. It does not require any skills but I do teach about dog behaviour, how to properly train your dog. It is not always easy to teach that a dog needs to know who is in charge but they get it at the end. There are also many animals which need a certain type of person to draw them out of their shell. Many come from an abusive background. I'm often not the right person because I'm very straight forward. but we need other people, more gentle. And the dogs behaviour change majorly.
Otherwise, we work in groups. So we need a good coordination. and so on. So nothing required but we do learn new things.

Q: What influence does the volunteering have on the general well-being of the volunteers?
GEM_A4: You ask how it's affecting the team of volunteers? yes. It's quite an interesting diverse people from very young to older 55 even 60 come to volunteer. So it is a challenge keeping everybody happy. How you walk the dog might not be the way the other use to. I'm very strict. Not everybody might like that. Also with the dog they must behave. We don't have much social outside because we are all from different areas. But on a saturday, we sit down and chat. There are many lonely people as well, and they feel they belong somewhere. I give them all a task or a duty that one must make sure that the water has been set out. And there an old lady and has nobody else in her life. She was very proud. It is very rewarding and when you see an adoption happening everybody cries as well. because it affects all of us. Many friendships have been formed.

I think that their view changes too. We are used to a shouted life. When I take them into the township, I will select initially a few. And I do remind them what's out there, where we go, out there. Because it is not like how we live. It is not easy. but the more we got to learn. and also the more they start to speak a language of other communities that they understand. For volunteer it can be hard but they do change. you see the people from those communities who bring you a dog by the neck and screaming. We have to learn that our way is not the only. We can't do anything right then. That's just how they live. But I won't take people that are too soft. I can't have people that start crying at that moment. I assess them out. We obviously always contact a leader of the community so they know we are coming. If we don't feel we are safe, we won't move. We don't go there without contact. We can say that people's awareness of social issues of poorer community and diversity has changed and I tell them that. They change to such an extent that they even take care of very difficult dogs.

Q: Do you help to develop, to create awareness about the gem project ?
GEM_A4: I had about 2 or 3 weeks ago, contact with a man from XXXX, so a very poor community where we work on tuberculosis. He found a cat. He had it sterilized by us. A very decent young man. And he decided to thanks us to come volunter. That day he wants to come a second time, I was driving to give him a lift. We are very hectic and I ask him to phone in at work to say we are in heavy traffic. But He had no airtime. So I tell him go on my phone, go onto gems and then just type in. I mean I had enough airtime. And I remind and told him. You can get rewarded with gem everytime you come volunteer. And you can buy airtime or data. He was quite impressed and he wanted to come again.
We tell our volunteer that come several times about GEM. Because we can only add a certain amount of people per week. depending on the budget GEM says.

Q: how intelligible is the project for the for the volunteers? How well is it comprehensible?
GEM_A4: It is very easy to use. You just have a USSD code and you type it in. And follow the process. 1 for airtime.Easy. Sometimes explaining is more difficult. People wonder where the money comes from. Most companies have to give back to the community as well. I think that's how XXX sources the funding. Other than that, people don't always understand why they volunteer and they get rewarded for it. It is quite a new concept you know. Volunteer don't get paid. So I try to explain the GEM concept. Volunteer give their time and we give them a little something. But if you don't want any then you don't get any. So there are mixed feelings sometimes.

Impact Analysis (IAM)

Summary of results

Name	Place	B-Type	S&L Type	# Indicators	Alignment with objectives
Florain	Fr	4th	LC	40	Yes
Cairn	Fr	4th	LC	39	Yes
Gonette	Fr	4th	LC	40	Yes
GEM Project	SA	1st	SC	34	Yes

	5 dimensions - Mean Score					
	Global Score	Governance Score	Culture Score	Economy Score	Environment Score	Social Score
Florain	107,00	3,20	1,60	2,69	2,25	3,29
Cairn	101,00	3,20	2,00	2,93	1,90	2,83
Gonette	110,00	3,29	2,20	2,88	2,11	3,50
GEM Project	88,00	1,40	3,25	2,54	4,00	2,92

	5 dimensions - # indicators					
	Global # indicators	Governance # indicators	Culture # indicators	Economy # indicators	Environment # indicators	Social # indicators
Florain	40	5	5	16	8	7
Cairn	39	5	5	14	10	6
Gonette	40	7	5	16	9	4
GEM Project	34	5	4	13	1	12

	Integral Approach			
	Subjective	Objective	Inter-objective	Inter-subjective
Florain	2,00	2,50	2,80	2,61
Cairn	1,50	1,86	2,75	2,84
Gonette	1,00	2,00	3,00	2,95
GEM Project	3,25	2,67	2,80	2,23

	Integral Approach			
	Subjective	Objective	Inter-objective	Inter-subjective
Florain	2	6	15	18
Cairn	2	7	12	19
Gonette	1	7	12	21
GEM Project	4	3	15	13

	Logic Model Hierarchy - Mean score		
	Activities	Output	Outcomes
Florain	3,11	2,86	2,22
Cairn	3,25	2,92	2,10
Gonette	3,38	2,69	2,55
GEM Project	2,63	2,22	2,83

	Logic Model Hierarchy - # indicators		
	Activities	Output	Outcomes
Florain	9	14	18
Cairn	8	12	20
Gonette	8	13	20
GEM Project	8	9	18

Florain - Nancy

n°	Integral Approach	Dimension	Level	Vision Goal	Guideline Principle	Evaluation Objective	Score	Justification
1	Subjective Existential reflection	Culture	Macro	Inner Outer Sense of Harmony	Altruism	Other-Oriented Cooperation & Self-Oriented Competition Equilibrium	1	Simple Paper Currency no credit possible or balance maybe be possible with funds from the bank
2		Social	Meso	Needs Satisfaction	Well-being	Increase self-confidence	N/A	
3						Friendship and Trust	N/A	
4						Improve quality of life	N/A	
5						Mindfulness and Spirituality	3	User Survey: 66% positive or slightly
6	Objective Neurobehavioral science	Economic	Micro	Financial Autonomy Development	Risk	Disaster mitigation	N/A	
7						Currency Security Features	2	3 + Publicly hidden
8						Transaction and Data safety	3	None yet
9						Record keeping and statistics	N/A	
10		Environment	Meta	Transition and autonomy	Relocation	GHG emission	1	
11			Meso	Ecological Footprint reduction	Biodiversity	Reforestation	N/A	
12					Eco-Friendly	Behaviour change	3	User Survey: 57% positive change
13						Waste management	3	User Survey: 39%
14						Water Management	N/A	
15			Micro	Responsible consumption Motivation		Green Economy	3	User Survey: around 40% for organic, fair and local
16	Inter-subjective Critical reflection	Culture	Meta	Societal Acceptance	Societal	Recognition credibility legtimacy from (Inter-) governmental institution	2	1 institutional support and struggle for more
17						Transverse cross-disciplinary integral holistic collective intelligence	1	None
18			Meso	Pluralism Inclusivity Diversity	Creativity	Alternative Flexible Libertarian Measure of Value	1	No special incentive
19						Softskills and hard skills design thinking	N/A	
20		Economic	Macro	Make Exchange Possible	Resilience	Training	2	User Survey: 8%
21							3	50hours per year + Events
22			Meso	Inclusice Community-Building	Viability	Participation	3	User survey: 39% already participated
23						Friendly User	3	User Survey: 69%

24						Intelligibility	4	User Survey: 82%
25						Team Capacity	3	3 Groupes de travail, Comité de pilotage, 5 Collèges
26		Social	Meta	Link share reciprocity Solidarity	Cooperation	Exchangeability	2	In euro for Businesses only
27						Co-creation	4	More than 100/150 with open forums
28						New skills	N/A	
29			Macro	Equity and justice	Engagement	Involvement	3	User Survey: 59% positive
30						Inclusion	N/A	
31						Social service dependent	N/A	
32						Cohesion	N/A	
33			Meso	Needs satisfaction	Diversity	Educational level repartition	3	User Survey: More than 75% have higher education
34			Micro	Cohesion cooperation Sharing vector	Mission	Ethic Charter	4	Charte des valeurs
35						Conducts Code	4	Internal code of conduct and sociocratic rules
36					Education	Enrolment	N/A	
37	Inter-Objective Complexity Economics	Culture	Micro	Innovation Confidence Humility	Innovation	Open Questioning Capacity	3	Improvement in trainings and tools
38		Governance	Meta	Participatory Democracy	Democracy	Collaborative Election Decision Process: Consent Sociocracy Holacracy	3	6 Collèges
39							3	1 person 0,7 FT + around 30 active volunteers
40			Macro	Citizenship Engagement Recognition		Effective Stakeholder Involvement Stimulation	3	60 present at the last GA
41			Meso	Independent Control	Legal	Independent Quality Control Process	N/A	
42			Micro	Monetary Creation as a common good		National Legislation	4	Special Law for CC in France
43					Transparency	taxation	3	No VAT or business taxes
44						Open Source system	N/A	
45						Open Banking	N/A	
46						Free Code and legality	N/A	
47		Economic	Meta	Crisis Resiliency	Resilience	Market Diversity	2	9 internal categories
48							3	21producers
49			Macro	Make exchange Possible		Tipping Point Network Scale	2	88 businesses
50						Interoperability	2	500

51			Micro	Financial Autonomy Development	Finance	Investment standards	4	NEF - ethical bank
52						Loan Standards	N/A	
53					Accountancy	Accountancy Standards	N/A	
54						Appropriate Socio-Environmental Accountacy Scheme	N/A	
55					Management	Monitoring and evaluation	1	None
56					Exchange	Demurrage/interest	N/A	None
57						Debt levels	N/A	
58						Discount rate	N/A	
59						Salary Bonus	N/A	
60						Exchange rates	2	Not possible for user but for business 5% or 10€/year if end of the supply chain
61						Backed System	4	Entirely Backed in € NEF
62		Social	Micro	Cohesion Cooperation Sharing Vector	Poverty	Income Increase	N/A	
63							N/A	
64						Employment	N/A	
65							N/A	
66		Environment	Meta	Transition and autonomy	Relocation	local growth	N/A	
67							2	Business Survey: 36% used for business purchases
68							2	Business Survey: 9% estimate more than 5% increase
69			Macro	Eco-Localization relocation		local Consumption	N/A	
70						Currency exchange	3	Business Survey: 45% receive Florain in Salaries
71							1	36000 in circulation Business survey: 32% received more than 200F from Customers; 50% from supplier

Cairn - Grenoble - IAM

n°	Integral Approach	Dimension	Level	Vision Goal	Guideline Principle	Evaluation Objective	Score	Justification
1	Subjective Existential reflection	Culture	Macro	Inner Outer Sense of Harmony	Altruism	Other-Oriented Cooperation & Self-Oriented Competition Equilibrium	1	Simple Paper Currency no credit possible or balance maybe be possible with funds from the
2		Social	Meso	Needs Satisfaction	Well-being	Increase self-confidence	N/A	
3						Friendship and Trust	N/A	
4						Improve quality of life	N/A	
5						Mindfulness and Spirituality	2	ITW: "meet with people sharing values" "No effect yet because too small"
6	Objective Neurobehavioral science	Economic	Micro	Financial Autonomy Development	Risk	Disaster mitigation	N/A	
7						Currency Security Features	3	5
8						Transaction and Data safety	3	None yet
9						Record keeping and statistics	N/A	
10		Environment	Meta	Transition and autonomy	Relocation	GHG emission	1	
11			Meso	Ecological Footprint reduction	Biodiversity	Reforestation	N/A	
12					Eco-Friendly	Behaviour change	2	ITW: Already local/organic consumption but offers listing
13						Waste management	2	Business survey: 21% agree
14						Water Management	1	Business survey: 3% agree
15			Micro	Responsible consumption		Green Economy	1	Business survey: 10% agree
16	Inter-subjective Critical reflection	Culture	Meta	Societal Acceptance	Societal	Recognition credibility legtimacy from	3	2 (The city and metro)
17						Transverse cross-disciplinary integral	2	3 academics
18			Meso	Pluralism Inclusivity Diversity	Creativity	Alternative Flexible Libertarian Measure	1	Parity with Euro; No special system;
19						Softskills and hard skills design thinking	N/A	
20		Economic	Macro	Make Exchange Possible	Resilience	Training	N/A	
21							N/A	
22			Meso	Inclusive Community-Building	Viability	Participation	3	Business Survey: 41% already participated
23						Friendly User	3	Business survey: 72% Agree ITW: "It's pretty easy"
24						Intelligibility	3	Business survey: 69% Agree ITW:" It's easy to understand"

25						Team Capacity	3	CP + 3 Working groups + Local Groups
26		Social	Meta	Link share reciprocity Solidarity	Cooperation	Exchangeability	2	in euro, only for businesses
27						Co-creation	4	200 active from the begining throughout the
28						New skills	N/A	
29			Macro	Equity and justice	Engagement	Involvement	1	ITW: "Still marginal use"
30						Inclusion	N/A	
31						Social service dependent	N/A	
32						Cohesion	N/A	
33			Meso	Needs satisfaction	Diversity	Educational level repartition	N/A	
34			Micro	Cohesion cooperation Sharing vector	Mission	Ethic Charter	4	yes
35						Conducts Code	4	Yes
36					Education	Enrolment	N/A	
37	Inter-Objective Complexity Economics	Culture	Micro	Innovation Confidence Humility	Innovation	Open Questioning Capacity	3	E-currency for Professional this year and year after for Users
38		Governance	Meta	Participatory Democracy	Democracy	Collaborative Election Decision Process: Consent Sociocracy Holacracy	3	3 types of stakeholder
39							3	1 FT + 3 interns + 10 volunteers
40			Macro	Citizenship Engagement		Effective Stakeholder Involvement	3	Business survey: Participated at least once 41%
41			Meso	Independent Control	Legal	Independent Quality Control Process	N/A	
42			Micro	Monetary Creation as a common good		National Legislation	4	Special Law for CC in France
43					Transparency	taxation	3	No VAT or business taxes
44						Open Source system	N/A	
45						Open Banking	N/A	
46						Free Code and legality	N/A	
47		Economic	Meta	Crisis Resiliency	Resilience	Market Diversity	3	20 internal categories
48							3	21 producers Business survey: 40%
49			Macro	Make exchange Possible		Tipping Point Network Scale	3	171 businesses; 1050 Users
50						Interoperability	3	1050 users
51			Micro	Financial Autonomy Development	Finance	Investment standards	4	NEF
52						Loan Standards	N/A	

53					Accountancy	Accountancy Standards	N/A	
54						Appropriate Socio-Environmental	N/A	
55					Management	Monitoring and evaluation	1	none yet
56					Exchange	Demurrage/interest	N/A	
57						Debt levels	N/A	
58						Discount rate	N/A	
59						Salary Bonus	N/A	
60						Exchange rates	2	2% for businesses only, users are not allowed
61						Backed System	4	100% backed in Euro
62		Social	Micro	Cohesion Cooperation Sharing Vector	Poverty	Income Increase	N/A	
63							N/A	
64						Employment	N/A	
65							N/A	
66		Environment	Meta	Transition and autonomy	Relocation	local growth	N/A	
67							1	3 new links ei business survey: 10%
68							2	Business survey: 7% see an increase ITW: "go to new businesses"
69			Macro	Eco-Localization relocation		local Consumption	4	Business survey: 85% produce more than 80% of local products
70						Currency exchange	3	Business survey: 31% percieve or will % of
71							2	53 000 in circulation

La Gonette - Lyon

n°	Integral Approach	Dimension	Level	Vision Goal	Guideline Principle	Evaluation Objective	Score	Justification
1	Subjective Existential reflection	Culture	Macro	Inner Outer Sense of Harmony	Altruism	Other-Oriented Cooperation & Self-	1	Simple Paper Currency no credit
2		Social	Meso	Needs Satisfaction	Well-being	Increase self-confidence	N/A	
3						Friendship and Trust	N/A	
4						Improve quality of life	N/A	
5						Mindfulness and Spirituality	N/A	
6	Objective Neurobehavioral science	Economic	Micro	Financial Autonomy Development	Risk	Disaster mitigation	N/A	
7						Currency Security Features	3	8 - Euro is at 9 known to the public
8						Transaction and Data safety	3	none yet
9						Record keeping and statistics	2	Record of € to CC on paper lists Record of CC Bar-code activated (e-
10		Environment	Meta	Transition and autonomy	Relocation	GHG emission	1	there is local consumption but only user are not even 1% of the population
11			Meso	Ecological Footprint reduction	Biodiversity	Reforestation	N/A	
12					Eco-Friendly	Behaviour change	N/A	
13						Waste management	2	Business survey: 27% change their
14						Water Management	1	Business survey: 15% change water
15			Micro	Responsible consumption Motivation		Green Economy	2	Business survey: 34% increased
16	Inter-subjective Critical reflection	Culture	Meta	Societal Acceptance	Societal	Recognition credibility legtimacy from (Inter-) governmental institution	4	5 - Métropole de Lyon; Ville de Lyon; Fondation Up; Fondation Crédit
17						Transverse cross-disciplinary integral	2	2 (Blanc and Fare)
18			Meso	Pluralism Inclusivity Diversity	Creativity	Alternative Flexible Libertarian Measure	1	Parity with Euro; No special system
19						Softskills and hard skills design thinking	N/A	
20		Economic	Macro	Make Exchange Possible	Resilience	Training	N/A	
21							3	14 trainings organized + 13 Animations
22			Meso	Inclusice Community-Building	Viability	Participation	3	Business Survey: 50% already
23						Friendly User	3	Business survey: 67% consider easy or
24						Intelligibility	3	Business survey: 74% consider easy or
25						Team Capacity	3	4 teams

26		Social	Meta	Link share reciprocity Solidarity	Cooperation	Exchangeability	4	In euro no limit
27						Co-creation	2	10 people
28						New skills	N/A	
29			Macro	Equity and justice	Engagement	Involvement	N/A	
30						Inclusion	N/A	
31						Social service dependent	N/A	
32						Cohesion	N/A	
33			Meso	Needs satisfaction	Diversity	Educational level repartition	N/A	
34			Micro	Cohesion cooperation Sharing vector	Mission	Ethic Charter	4	"Charte des valeurs de la gonette" see
35						Conducts Code	4	"Règlement Intérieur" + statut conflict
36					Education	Enrolment	N/A	
37	Inter-Objective Complexity Economics	Culture	Micro	Innovation Confidence Humility	Innovation	Open Questioning Capacity	3	1 one the past year, 3 to come this
38		Governance	Meta	Participatory Democracy	Democracy	Collaborative Election Decision Process: Consent Sociocracy Holacracy	4	7 collèges or types of Stakeholder
39							3	3 Civic Services overs 12 month; 4 part
40			Macro	Citizenship Engagement Recognition		Effective Stakeholder Involvement Stimulation	3	40 members present at GA in 2016 Business survey: More than 50% already paricipated in meetings and
41			Meso	Independent Control	Legal	Independent Quality Control Process	N/A	
42			Micro	Monetary Creation as a common good		National Legislation	4	Special Law for CC in France
43					Transparency	taxation	3	No VAT or business taxes
44						Open Source system	3	Dolibarr - Open source but no idea if
45						Open Banking	N/A	
46						Free Code and legality	3	Dolibarr
47		Economic	Meta	Crisis Resiliency	Resilience	Market Diversity	3	21 internal categories - Wipo?
48							2	Survey=15% of Producers Market diversity: mainly 3 categories:
49			Macro	Make exchange Possible		Tipping Point Network Scale	4	280 Partners (Business & Associations), 1600 users with a peak
50						Interoperability	4	1600 users
51			Micro	Financial Autonomy Development	Finance	Investment standards	3	Euro backed at credit cooperatif
52						Loan Standards	N/A	
53					Accountancy	Accountancy Standards	N/A	

54						Appropriate Socio-Environmental	N/A	
55					Management	Monitoring and evaluation	2	Based on - #of users - # Businesses - % of Re-enrollement - % of implication of local authorities
56					Exchange	Demurrage/interest	N/A	None
57						Debt levels	N/A	No credit given to users
58						Discount rate	1	There is a section on the website but it is on the initative of the business.
59						Salary Bonus	N/A	
60						Exchange rates	N/A	none
61						Backed System	4	Entirely Backed in €
62		Social	Micro	Cohesion Cooperation Sharing Vector	Poverty	Income Increase	N/A	
63							N/A	
64						Employment	N/A	
65							N/A	
66		Environment	Meta	Transition and autonomy	Relocation	local growth	N/A	
67							2	8% will or have changed Supply chain
68							2	7% see increase thanks to CC
69			Macro	Eco-Localization relocation		local Consumption	4	More than 80% are either produced
70						Currency exchange	2	Nearly 1/3 think or received part of
71							3	In circulation 120000

GEM Project

n°	Integral Approach	Dimension	Level	Vision Goal	Guideline Principle	Evaluation Objective	Score	Justification
1	Subjective Existential reflection	Culture	Macro	Inner Outer Sense of Harmony	Altruism	Other-Oriented Cooperation & Self-	3	Mainly Volunteering and getting
2		Social	Meso	Needs Satisfaction	Well-being	Increase self-confidence	3	ITW : "People are more vocal" "They actually take intiative now"
3						Friendship and Trust	4	ITW: "Lonely people who come to
4						Improve quality of life	3	ITW: is kind of an allowance; eat with the family; buy electricity
5						Mindfulness and Spirituality	N/A	
6	Objective Neurobehavioral science	Economic	Micro	Financial Autonomy Development	Risk	Disaster mitigation	3	
7						Currency Security Features	N/A	
8						Transaction and Data safety	2	
9						Record keeping and statistics	3	
10		Environment	Meta	Transition and autonomy	Relocation	GHG emission	N/A	
11			Meso	Ecological Footprint reduction	Biodiversity	Reforestation	N/A	
12					Eco-Friendly	Behaviour change	N/A	
13						Waste management	N/A	
14						Water Management	N/A	
15			Micro	Responsible consumption Motivation		Green Economy	N/A	
16	Inter-subjective Critical reflection	Culture	Meta	Societal Acceptance	Societal	Recognition credibility legtimacy from	4	Brand South Africa
17						Transverse cross-disciplinary integral	N/A	
18			Meso	Pluralism Inclusivity Diversity	Creativity	Alternative Flexible Libertarian Measure	3	Everybody has the same; fixed amount
19						Softskills and hard skills design thinking	N/A	
20		Economic	Macro	Make Exchange Possible	Resilience	Training	N/A	
21							1	only word of mouth
22			Meso	Inclusice Community-Building	Viability	Participation	4	10219 active members
23						Friendly User	3	USSR + App design, some issue
24						Intelligibility	3	ITW: with some issue about where
25						Team Capacity	1	6 members: some part time

26		Social	Meta	Link share reciprocity Solidarity	Cooperation	Exchangeability	2	5 possible payments
27						Co-creation	1	2 founders
28						New skills	3	ITW: much on interpersonnal skills, presentation, time management
29			Macro	Equity and justice	Engagement	Involvement	3	ITW: get a sense of social injustice
30						Inclusion	4	ITW: many different background from
31						Social service dependent	N/A	
32						Cohesion	3	ITW: create a lot of friends,
33			Meso	Needs satisfaction	Diversity	Educational level repartition	4	ITW: Often passed metric and follow
34			Micro	Cohesion cooperation Sharing vector	Mission	Ethic Charter	N/A	
35						Conducts Code	N/A	
36					Education	Enrolment	3	Support initiative with tutoring
37	Inter-Objective Complexity Economics	Culture	Micro	Innovation Confidence Humility	Innovation	Open Questioning Capacity	3	Create a new different entity to improve payment method; GEM quiz…
38		Governance	Meta	Participatory Democracy	Democracy	Collaborative Election Decision Process: Consent Sociocracy Holacracy	1	Stakeholders are not really involved in
39							1	6 members: some part time
40			Macro	Citizenship Engagement Recognition		Effective Stakeholder Involvement	1	No really participation
41			Meso	Independent Control	Legal	Independent Quality Control Process	N/A	
42			Micro	Monetary Creation as a common good		National Legislation	3	FICA / POPI
43					Transparency	taxation	N/A	
44						Open Source system	N/A	
45						Open Banking	N/A	
46						Free Code and legality	1	Nothing free
47		Economic	Meta	Crisis Resiliency	Resilience	Market Diversity	1	5 categories to redeem with 14
48							N/A	
49			Macro	Make exchange Possible		Tipping Point Network Scale	2	users: 10219 14 products
50						Interoperability	4	Users 10219
51			Micro	Financial Autonomy Development	Finance	Investment standards	N/A	
52						Loan Standards	N/A	
53					Accountancy	Accountancy Standards	N/A	

54						Appropriate Socio-Environmental	N/A	
55					Management	Monitoring and evaluation	3	KPI's linked to the app
56					Exchange	Demurrage/interest	N/A	
57						Debt levels	N/A	
58						Discount rate	N/A	
59						Salary Bonus	N/A	
60						Exchange rates	N/A	
61						Backed System	3	Sponsored
62		Social	Micro	Cohesion Cooperation Sharing Vector	Poverty	Income Increase	2	ITW: The amount is better seen as complementary or like allowance
63							N/A	
64						Employment	N/A	
65							N/A	
66		Environment	Meta	Transition and autonomy	Relocation	local growth	N/A	
67							N/A	
68							N/A	
69			Macro	Eco-Localization relocation		local Consumption	N/A	
70						Currency exchange	N/A	
71							4	Since the begining in 2015 : 358468. Unspent for the moment 12000

Place des Doyens, 1 bte L2.01.01, 1348 Louvain-la-Neuve, Belgique www.uclouvain.be/lsm